
**Manitoba
Energy and Mines**
Geological Services



Miscellaneous Publication 91-2, Part C

**Mineral Inventory Cards (Supplement
to Economic Geology Report ER79-6):
Island Lake, NTS Areas 53E/9 to
53E/16, and 53F**

Compiled by P. Athayde
Winnipeg, 1991

Energy and Mines

Hon. Harold J. Neufeld
Minister

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Deputy Minister

Geological Services

W.D. McRitchie
Director

This publication is available in large print, audiotape or braille on request

PRODUCT GOLD

N.T.S. AREA 53E/9 NE

REF. AU 1

NAME OF PROPERTY

Jack of Hearts

OWNER OR OPERATOR AND ADDRESS

1990-Tygar Resources Inc.
1624-555 St. Mary Ave
Winnipeg, Manitoba
R3C 3X4

OBJECT LOCATED Centre of Jack of
Hearts M.C.

Mining Division Winnipeg

Lat. 53° 44.7'

Long. 94° 02.8'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 23, 24 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt and andesite flows. The occurrence consists of gold-bearing quartz veins that occur on the north, east, and west sides of an island 2 km southeast of Okay Island. The vein strikes 86° to 106°, and dips 80°-90°N through sheared greenstone. It was exposed for 32 m (105 ft) and averaged 0.5 m (1.5 ft) wide. Pyrite, galena, and minor chalcopyrite occur in the vein. Gold, silver, and minor zinc and antimony were noted in assays.

Theyer (1982) described a zone of mineralization extending from the southeast tip of Okay Island (Zolata occurrence, 63K/16 SE AU 2) to the Jack of Hearts occurrence 2 km southeast. The mafic host rocks are characterized by a 100-150 m wide silicification halo with a sulphide-bearing quartz vein at its core. The sulphide content of the vein ranges from 1-25%. Assays of grab samples taken from the Jack of Hearts No. 10 occurrence yielded up to 129.6 g/t (3.78 oz/ton) gold.

HISTORY OF EXPLORATION AND DEVELOPMENT

The claims are located on a group of islands in Island Lake, 11 km northeast of the east end of Benson Bay, and approximately 258 km southeast of the Hudson Bay railway line.

Prior to 1931, the property had been staked under the Lucky Strike 1, 4 (211372, 371), and Fremont 2 (211373) claims (Mining Claim Map). No information is available on these claims.

The property was staked in 1931 as Jack of Hearts, Jack of Hearts Nos. 1 and 4 (W 247, 66, 67) by E.H. Wass and J.H. Reahill and assigned to S. Bell-Clifford and A.R. MacDonell. The next year it was assigned to T. Lindsley and in 1932 to Island Lake Mines Limited.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Lead, copper, silver, zinc, antimony

NAME OF PROPERTY
Jack of Hearts

N.T.S. AREA 53E/9 NE

FILE NO. 291
REF. AU 1

Plan of Jack of Hearts' claims, showing diamond drilling
February and March, 1935; Scale 1:6000
(Source: Non-confidential Assessment File No. 91145).



NAME OF PROPERTY

Jack of Hearts

N.T.S. AREA 53E/9 NE

FILE NO. 291

REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT

cont'd

From 1932 to 1934, 16 trenches were dug on these claims. Six diamond drill holes were put down to depths of 46 to 76 m (150 to 250 ft) with a total footage of 410 m (1345 ft). "Narrow sections of massive sulphides were encountered in five of them varying from six inches to one foot (15-30 cm) in width and averaging about 0.75 ozs. of gold per ton (25.7 g/t)" (Island Lakes Mines Limited, Mining Engineering File). In 1932 samples sent to the Ore Dressing and Metallurgical Labs., Ottawa, averaged:

Au - 2.47 oz/ton (84.7 g/t)
 Ag - 10.04 oz/ton (344.2 g/t)
 Cu - 2.00%
 Pb - 1.64%
 Zn - 0.57%
 As - 0.06%

In 1934, some 63.5 tonnes (70 tons) of gold-bearing quartz was mined from two open pits (each 15 m long, 3-3.7 m deep). The two 32 tonne (35 tons) consignments, which were milled on Mine Island, averaged 10.3 g/t (0.3 oz/ton) and 35.9 g/t (1.05 oz/ton) Au (Island Lakes Mines Limited, Mining Engineering File). The claims were leased for 21 years in 1937 (Jack of Hearts M.C., Nos. 1 and 4, M 917, 18, 21, respectively).

Since 1959, when the claims were cancelled, the following restakings have occurred:

Year	Claim Name	Claim Number	Staker
1959	Jack No. 1, 3, 5	W 31984, 6, 8	J. Donner
	-assigned R.J. Jowsey Mining Company Limited in 1959.		
1963	Mink No. 5-12	W 36228-33, 36263, 4	G.V. McBride
	-assigned M.C. Mosher in 1963.		
1963	Liz No. 2	W 36344	Mrs. C. Wass
	-Kerr Addison Mines Limited did an airborne EM/Mag survey under Airborne Permit No. 56 in 1965 (Non-confidential Assessment File No. 91652). -84 m ³ (900 cu ft) of rock was blasted in 1967.		
1970	Liz No. 1-3	W 43329, 30, 51	Mrs. R. Moniass
	-In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684).		
1973	Seabec No. 1-4	W 44225-8	R.G. Holden

In 1981, BP Minerals Limited staked CB 12987, 92 (Bay 31, 36) and carried out geophysical surveys (ground VLF-EM, Mag), a reconnaissance mapping program, and a humus sampling program (Non-confidential parts of Assessment File No. 70354). Grab samples taken from four known gold occurrences in the Bay 31 claim area, that year, returned the following assays:

#5 (Pointer Island East):
 pit sample assayed 6.17 g/t (0.18 oz/ton) Au.
 #6 (400 m west of #5):
 9.3 g/t (0.27 oz/ton) and 33.3 g/t (0.97 oz/ton) Au; 155.6 g/t (4.54 oz/ton) and 82.6 g/t (2.41 oz/ton) Ag.

NAME OF PROPERTY

Jack of Hearts

N.T.S. ARRA 53E/9 NE

FILE NO. 291

REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

#7 (Small island 250 m west-northwest of #6):

5.5 g/t (0.16 oz/ton) Au and 28.8 g/t (0.84 oz/ton) Ag

#8 (Island 600 m west of tip of Pointer Is.):

164.6 g/t (4.8 oz/ton) Au, 168 g/t (4.9 oz/ton) Ag;

pyrite-sericite-schist sample returned 1.1 g/t (0.031 oz/ton) Au, trace Ag.

The humus sampling program outlined the mineralized zone on the west part of Pointer Island; another program carried out in 1982 indicated anomalous areas on Pointer Island and on West Hearts Island. Other exploration work carried out in 1982 included shoreline mapping and rock chip sampling, which resulted in the discovery of 11 more gold occurrences (3 next to the 1981 occurrences on Pointer Island, 1 on the southwest shore, 1 on Leech Island, 1 on West Hearts Island, and 5 on Annex Island).

Some of the sampling results reported were:

Location

Pointer Island (southwest shore)

Grab sample assay

grab sample from 3 small boulders of sulphide-bearing quartz vein returned 68.3 ppm Au, 20.7 ppm Ag, 1.1% Cu, 0.5% Pb.

Pointer Island (west tip)

up to 18000 ppb Au, 19813 ppm Cu, 4839 ppm Pb reported.

West Hearts Island (north shore)

2000 ppb Au, 0.9% Cu, 0.8% Pb, 17.1 g/t (0.5 oz/ton) Ag.

Leech Island (south shore)

5500 ppb Au from chip sample of two parallel quartz veins.

Annex Island (150 m northwest of Pointer Is.)

4.7% Cu, 3.6% Pb, 2.2% Zn and 30.8 ppm Ag (ICP analysis).

In 1982, the Manitoba Government conducted rock sampling on a grid: a sample from the southwest shore of West Hearts Island assayed 129.6 g/t (3.78 oz/ton) Au; a sample from Pointer Island (north part) returned 36.3 g/t (1.06 oz/ton) Au and 199.5 g/t (5.82 oz/ton) Ag (Theyer, 1982).

In 1983, trenching (106 m) was done on Bay 31 by G. Badiuk of Garden Hill, followed by channel sampling and mapping of the exposed bedrock by BP Minerals Limited (Non-confidential Assessment File No. 92731). Trenches A-E were put down at the west tip of Pointer Island; trenches F-H on the north shore; trench I near a humus anomaly on the central part of the island. A quartz vein (Trench A) with pyrite and chalcopyrite, hosted in metagabbro-diorite, returned 10.9 g/t (0.32 oz/ton) Au and 42.8 g/t (1.25 oz/ton) Ag over 0.4 m. Three, one metre long, channel samples of a quartz vein in metagabbro in Trench C returned 40.8 g/t (1.19 oz/ton) Au and 138.2 g/t (4.03 oz/ton) Ag; the vein contained pyrite, chalcopyrite, galena, and some carbonate and was encrusted with 1-2 cm of red gossan and malachite. Copper grades ranged from 9552-17 445 ppm (ICP); lead ranged from 1161-7623 ppm. A 15 cm thick quartz vein in metagabbro in Trench F containing pyrite, chalcopyrite and galena returned 2700 ppb Au.

NAME OF PROPERTY

Jack of Hearts

N.T.S. AREA 53E/9 NE

FILE NO. 291

REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1984, BP Minerals Limited carried out total field magnetic and VLF-EM (EM-16) surveys on Bay 31 (Non-confidential parts of Assessment File No. 70766). Bay 36 was cancelled in 1986. Bay 31 was cancelled in 1987.

In 1987, Pointer 1 (W 51391) was staked by Jim Johnson for Tygar Resources Inc. Corona Corporation obtained the property in January 1989 and transferred it back to Tygar Resources Inc. in September 1989.

HISTORY OF PRODUCTION

63.5 tonnes (70 tons) of ore were processed in 1934-35.

REFERENCES

Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.

Manitoba Mines Branch:

- a) Mining Engineering Files; Island Lake Mines Limited; NE 9, 53E
- b) Mining Recording Files; File Nos. 8306, 7, 8 (Jack of Hearts M.C., Jack of Hearts No. 1, 4).
- c) Non-confidential Assessment Files; File Nos. 91145, 91652, 91684, +92731, +70354 (non-confidential parts), 70766 (non-confidential parts)
- d) Corporation Files; Island Lake Mines Limited
- e) Annual Report on Mines and Minerals; 7th-p. 60, 62.

McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.

Mines Branch, Ottawa, 1934, The recovery of gold from the ore of Ventures Ltd., Island Lake property, Manitoba; in Canada Department of Mines, Investigations in Ore Dressing and Metallurgy, 1932, No. 736, Investigation Report No. 454, p. 145, 156.

Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.

Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-33.

Theyer, P., 1982, Mineral deposit investigations-Superior Province; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1982, p. 55-57.

Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

Map 53E/9, Benson Bay, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.

Map 4022G, Benson Bay, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.

Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY
Jack of Hearts

N.T.S. AREA 53E/9 NE

FILE NO. 291
REF. AU 1

MAP REFERENCES

- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NE 9, 53E, Scale 1:31 680, circa 1959, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	JR	PA
By Date	1-61	1-74	08-87	04-90

PRODUCT	Pyrite	H.T.S. AREA	53E/9 NE, NW	REF. PYR 1
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NAME OF PROPERTY:	OWNER OR OPERATOR AND ADDRESS
Benson Bay	1990 -Open

OBJECT LOCATED:	three pyrite showings	MINING DIVISION	Winnipeg
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Lat.	1. 53° 41'	Long.	1. 94° 09'	UNCERTAINTY: 1000 m
	2. 53° 42'		2. 94° 15'	
	3. 53° 43'		3. 94° 17'	

Sec.	Tp. 54	R. 23 EPM
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DESCRIPTION OF DEPOSIT

The three pyrite showings, shown on Map 26-1960, occur in Precambrian granite and granite gneisses.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960, H.A. Quinn noted three occurrences of pyrite on the east shore, in the centre and on the north shore of Benson Bay in Island Lake (Map 26-1960). The deposits are located approximately 257 km southeast of the Hudson Bay railway line.

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- McMurchy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.

MAP REFERENCES

- Map 53E/9, Benson Bay, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4022G, Benson Bay, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.

NAME OF PROPERTY

Benson Bay

N.T.S. AREA 53E/9 NE, NW**FILE NO.** 293**REF.** PYR 1

MAP REFERENCES cont'd

- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.P. Ermanovics, Geological Survey of Canada (1987).

Comp./Rev.		CC	PA
By Date	02-61	02-74	06-90

PRODUCT Copper

N.T.S. AREA 53E/9 NE

REF. CU 1

NAME OF PROPERTY:
Rose Lake (CB 9646)OWNER OR OPERATOR AND ADDRESS
1990 -Open

OBJECT LOCATED: Trench #2

MINING DIVISION Winnipeg

Lat. 53° 38.3'

Long. 94° 1.05'

UNCERTAINTY: 1000 m

Sec.

Tp. 54

R. 24 EPM

DESCRIPTION OF DEPOSIT

Drilling intersected Precambrian biotite granodiorite gneiss, granite, amphibolite, and gabbro that contained minor chalcopyrite and pyrrhotite. Four trenches cut the mineralized zone over a length of 305 m (1000 ft).

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the northeast end of Rose Lake, about 11 km southeast of Benson Bay and 13 km west of the Manitoba - Ontario border.

The following stakings and exploration activity were reported:

<u>Year</u>	<u>Activity</u>
1959	Cew 1, 2 (W 32192, 93) staked by Carl Wass
1960	Three year option agreement between Carl Wass and Phelps Dodge Corporation of Canada, Limited which drilled three shallow holes (two of which were drilled on an island) on Cew 1 (W 32192).
1960	Cat 11, 12, 13, 19, 20 (W 33332-34, 38, 39) staked by R.C. Cunningham and assigned to Phelps Dodge Corporation of Canada, Limited.
1961	Two holes totalling 107 m were drilled on Cew 1 (W 32192) and three holes totalling 244 m were drilled on Cat 20 (W 33339). Drill holes on Cat 20 intersected several sections of gabbro with up to 7% sulphides (pyrite, pyrrhotite, chalcopyrite) (Non-confidential Assessment File No. 92161).
1964	Cat 11, 12, 13, 19, 20 were cancelled.
1969-70	Work was reported on Cew 1, 2
1970	Cew 8, 5 (W 43064, 62) staked over the former Cat 19, 20 claims by Carl E. Wass.
1971	Carl E. Wass assigned 1/3 of his interest in the Cew claims to Rod McKenzie and 1/3 to Alice Evelyn Brown in July 1971. Work was reported on Cew 1, 2, 8, 5 that year. In August 1971, Rod McKenzie staked CB 4409 over the former Cat 11-13 claims. In 1971, all claims were assigned to McIntyre Porcupine Mines, Limited.

Associated minerals or products of value

Nickel, cobalt, platinum, palladium, silver, chromium, gold, molybdenum.

NAME OF PROPERTY

Rose Lake (CB 9646)

N.T.S. AREA 53E/9 NE

FILE NO. 1026

REF. CU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd**Year Activity cont'd**

- 1972 A ground geophysical (EM/Mag) survey was done. Later that year, Carl E. Wass, Rod McKenzie, Alice E. Brown each obtained a 1/3 interest in the Cew claims from McIntyre.
- 1973-74 Work was reported on Cew 1, 2.
- 1975 McIntyre Porcupine Mines, Limited changed its name to McIntyre Mines Limited. CB 4409 was transferred to Alice E. Brown that year.
- 1976 CB 4409 cancelled.
- 1977 Cew 8, 5 cancelled in March 1977. Some trenching was done on Cew 1 that year (Non-confidential Assessment File No. 92162).
- 1979 Cew 1, 2 cancelled in January 1979.

A spectrographic analysis of a sample of hornblende containing pyrite and a bright red stain (erythrite) had indicated up to 1.85% Cu, 0.52% Ni, 0.05% Co, 0.3% Cr₂O₃, 0.1% TiO₂, 0.34 g/t (0.01 oz/ton) Au, 20.6 g/t (0.6 oz/ton) Ag, and trace Mo, according to a 1971 report (Non-confidential Assessment File Nos. 92726, 92730). A 1979 report from Mariposa, California indicated sample contents (by spectrographic analysis) of up to 1.5% Cr₂O₃, 0.4% Co, 8% Cu, and 0.03% TiO₂ (Non-confidential Assessment File No. 92730).

In 1980, CB 9646 (Rod) was staked by Rod McKenzie (with assistance from Leonard Harper). Trenching was carried out in 1980-1981 (Non-confidential Assessment File No. 92722). Samples taken across 12 m (40 ft) from a 31 m (100 ft) trench were assayed by Inco Metals Company: results indicated up to 1.94% Cu, 0.49% Ni, 0.06% Co, 0.41 g/t (0.012 oz/ton) Pt, 0.48 g/t (0.014 oz/ton) Pd, 7.54 g/t (0.22 oz/ton) Ag, 0.21 g/t (0.006 oz/ton) Au (Trench #4; Non-confidential Assessment File No. 92730). Work carried out in 1982-1983 included prospecting and the clearing out and blasting of old trenches. CB 9646 was transferred to Midway Lake Minerals Corp. in 1985.

CB 9646 was cancelled in June 1987, and was immediately restaked as Border 1 (W 51390) by Jim Johnson on behalf of Tygar Resources Inc.. The claim was cancelled in August 1989.

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W.K. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- Non-confidential Assessment Files; File Nos. 91162, 92161, 92162, 92722, 92726, 92730.
 - Mining Recording Files; File Nos. 55424, 25 (Cew 1, 2); Nos. 68670, 72 (Cew 5, 8); Nos. 58069-71, 75, 76 (Cat 11-13, 19, 20).

NAME OF PROPERTY
Rose Lake (CB 9646)

N.T.S. AREA 53E/9 NE

FILE NO. 1026
REF. CU 1

REFERENCES cont'd

- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.

MAP REFERENCES

- Map 53E/9, Benson Bay, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
Map 4022G, Benson Bay, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Preliminary Map P430, Varveclay Lake sheet, (Geology), by G. Bennett, Riley and assistants, Ontario Department of Mines (1967).
Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
*Claim Map Series NE 9, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

1. Location of Trench #2 is taken from a sketch map in Non-confidential Assessment File No. 92726.
2. In 1980, up to 1.23% Cu, 0.75% Ni, 0.03% Co was reported from Rod McKenzie's "Neil showing" (location not known) (Non-confidential Assessment File No. 92730).

Comp./Rev.	PA
By Date	06-90



PRODUCT Copper	N.T.S. AREA 53E/10 NW	REF. CU 1
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NAME OF PROPERTY: Wapus Bay	OWNER OR OPERATOR AND ADDRESS 1990 - Open
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OBJECT LOCATED: three sulphide showings	MINING DIVISION Winnipeg
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Lat. 1. 53° 43.8'	Long. 1. 94° 45.5'	UNCERTAINTY: 1000 m
2. 53° 43.5'	2. 94° 45.5'	
3. 53° 43.7'	3. 94° 46.1'	

Sec.	Tp. 54	R. 19 EPM
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DESCRIPTION OF DEPOSIT

Three sulphide occurrences are shown on Map 26-1960.

1. pyrite (north shore)
2. pyrite, chalcopyrite, galena, gold (south shore area)
3. pyrite, galena, chalcopyrite (northwest end of Wapus Bay)

These lie within the Precambrian Hayes River Group.

A tuffaceous sulphide-bearing unit with a potential strike length of more than 3 km was reported on the north shore (Axe and Bay showings). Mineralization consisting of layers or disseminations of pyrite, magnetite, pyrrhotite, and chalcopyrite was found over a width of 10 m. In the Axe showing area, mineralization was exposed over a length of 66 m and an average width of 5-7 m. Gold and copper were reported in sample assays (Non-confidential Assessment File No. 92952).

A 1.5 m thick quartz vein carrying gold, pyrite, galena was found on an island near the south shore of Wapus Bay.

Near the southwest shore, a sulphide-rich shear zone is exposed over a 1 x 3 m area. Zinc, copper, lead, and gold were returned in sample assays.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposits are on or around the west end of Wapus Bay, at the south end of Island Lake, which is approximately 258 km southeast of the Hudson Bay railway line.

The area has been staked several times although no work has been recorded.

Year	Claim Name and Number	Staker
1932	Mackilmon M.C., Mackilmon Nos. 1-9 (W 1160-9)	E.H. Minirieff
1934	Raleigh M.C., Raleigh Nos. 1-9 (W 3400-9)	Geo. Ross
1945	Han Nos. 1-19 (W 13039-56)	C.K. Hansen and J.G. Lawson
1971	CB 4331 -cancelled in 1973.	A. Wood

Associated minerals or products of value
lead, gold, zinc.

1901 '0'

NAME OF PROPERTY

Wapus Bay

N.T.S. AREA 53E/10 NW**FILE NO.** 294**REF. CU** 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Ames (1975) reported the presence of ultramafic rocks with asbestos and magnetite veins and talc schist, in the Wapus Bay area. Field examinations were done by the Manitoba Government in 1979 (Theyer, 1979, 1980).

Axe (W 46769) was staked by Ralph Birch in 1983, and was cancelled in 1985.

In 1986, Quiet Bay Minerals Corp. of Saskatoon, Saskatchewan restaked the northern showings under the Otter 1, 2, 3 (W 51188, 89, 90) claims and the south showing under the Blue Jay 2 (W 47521) claim. The company reported carrying out stripping, trenching, prospecting, geological mapping (1:2500), and magnetometer and VLF-EM (EM-16) surveys, at a cost of at least \$200 000.

Trenching and sampling on the north shore found 10-15% sulphides with up to 5.69 g/t (0.166 oz/ton) Au, 0.66% Cu in the Axe showing (Otter 3 claim) and up to 0.34 g/t (0.01 oz/ton) Au, 0.5% Cu in the Bay showing (Otter 1 claim). Three trenches (T-1, 2, 3) were put down on the Axe showing, located southeast of Quinn's pyrite showing; two trenches (T-6, 7) were put down on the Bay showing at the northwest end of Wapus Bay, about 3 km west of the Axe showing (on an island, southeast of Quinn's pyrite-lead-chalcoppyrite occurrence). The Hatchet zone, thought to be the extension of the Axe showing, was trenched (T-4) and a sample returned up to 2200 ppm Cu.

On an island near the south shore of Wapus Bay, near Quinn's pyrite-lead-chalcoppyrite-gold occurrence, a quartz vein with pyrite and galena yielded 17.14-30.51 g/t (0.5-0.89 oz/ton) Au. The main vein ('A' vein) was trenched (T-9) and samples returned up to 23.31 g/t Au in assays.

About 1.3 km southwest of the 'A' vein, on the southwest shore, a mineralized shear zone was trenched (T-8). Sample assays of 3.4% Zn, 0.53% Cu, and trace Pb, Au were reported.

By 1988, two year's work had been applied on the claims. The Blue Jay claim (containing the 'A' vein and the zinc showing) was cancelled in March 1990. The Otter claims were cancelled in April of 1990.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), p. 17, 47.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1818.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 92952.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake-Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.

NAME OF PROPERTY
Wapus Bay

N.T.S. AREA 53E/10 NW

FILE NO. 294
REF. CU 1

REFERENCES cont'd

- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 38-39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15, 48.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- Map 53E/10, Wapus Bay, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4040G, Wapus Bay, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map, Island Lake-Red Sucker Lake area (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NW 10, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	PA
By Date	02-61	02-74	06-90



PRODUCT Copper

N.T.S. AREA 53E/10 NE

REF. CU 2

NAME OF PROPERTY:

Copper Nos. 1-9

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED: Ni, Cu showing

MINING DIVISION Winnipeg

Lat. 53° 42.3'

Long. 94° 35.3'

UNCERTAINTY: 1000 m

Sec.

Tp. 54

R. 20 EPM

DESCRIPTION OF DEPOSIT

The deposit is situated in Precambrian gneisses, migmatite, which includes a mixture of sedimentary, granitic, and volcanic material.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the south shore of Island Lake immediately south of the east end of Confederation Island in Island Lake, which is approximately 258 km southeast of the Hudson Bay railway line.

It was staked by G.F. Wass in 1952 as Copper Nos. 1-9 (W 19394-402). Most of the work was done on Copper No. 2 and 3 in the form of stripping and trenching. There were 77 m³ (2712 cu ft) of earth removed from five areas on Copper No. 2 and 84 m³ (2974 cu ft) of rock trenched or blasted on Copper No. 3. The claims were cancelled in 1955.

In 1986, M. Issigonis, assisted by Eric Lavallee, staked Nipi 10 (W 51156) over the property for Midway Lake Minerals Corp.. Later that year, Midway transferred 20% interest in the claim to Bighorn Development Corporation and another 20% to Wydmar Resource Enterprises Ltd.. In 1987, a further 10% interest was transferred to each of these companies, with Midway retaining a 40% interest in the property. The claim was cancelled in 1988.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), p. 17, 47.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W.K. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.

Associated minerals or products of value
nickel.

NAME OF PROPERTY
Copper Nos. 1-9

N.T.S. AREA 53E/10 NE

FILE NO. 295
REF. CU 2

REFERENCES

Manitoba Mines Branch:

- a) Non-confidential Assessment Files; File No. 92868.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake-Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- Map 53E/10, Wapusk Bay, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4040G, Wapusk Bay, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- *Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map, Island Lake-Red Sucker Lake area (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NE 10, 53E, Scale 1:31 680, circa 1955, Mining Recording, Manitoba Mines Branch.

REMARKS

About 5.58 km northwest, rock sample assays of up to 40 ppb Au, 0.4 g/t Au, 190 ppm Zn, 730 ppm Cu were reported (Non-confidential Assessment File No. 92868).

Comp./Rev.	CC	PA
By Date	02-74	06-90

PRODUCT GOLD

N.T.S. AREA 53E/11 NW

REF. AU 1

NAME OF PROPERTY

IXL Group

OWNER OR OPERATOR AND ADDRESS

1990-Open

OBJECT LOCATED Centre of IXL No. 12

Mining Division Winnipeg

Lat. 53° 41.2'

Long. 95° 19'

UNCERTAINTY: 500 m

Sec.

Tp. 54

R. 15 EPM

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia and correlative amphibolitic schist and gneiss that is intruded by quartz porphyry. The occurrence consists of a series of gold- and sulphide-bearing quartz stringers that strike 065° and dip 85°SE and occur in both the quartz porphyry and volcanic rocks. The quartz is blue to white and contains pyrite, chalcopyrite and gold.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located at the south edge of Clam Lake in the Bigstone Lake area, which is about 225 km southeast of the Hudson Bay railway line.

The history of staking is as follows:

Year	Claim Name	Claim Number	Staker
1932	Hard Luck	W 905-10	
	Hard Luck No. 1-9	W 954-6	
	Denver		
1935	Denver No. 1-9	W 5888-95	J.A. MacDonald
	IXL Group	(W 7908, 10)	F. Reahil and
	(IXL No. 10, 12)		S. Staunton

The work, mostly stripping and trenching, was done on IXL No. 10 and 12. The claims were cancelled in 1939.

In 1970-71, an airborne geophysical survey was carried out by Geoterrex Limited for Amax Exploration, Inc. in the Reservation 96 area. Amax drilled two holes, east of this area, on the former IXL 14 claim: long intersections of disseminated to massive sulphides and drill core assays of up to 0.10% Cu, trace Zn, Au were reported (Non-confidential Assessment File No. 91801).

In March 1976, Manitoba Mineral Resources Ltd. (MMR) staked CB 6831, 32 over the property as part of their "Bigstone Lake Project" (Non-confidential Assessment File No. 92263). MMR carried out a horizontal loop EM survey and drilled four holes in the Clam Lake area to test northeast-trending EM anomalies; however, no significant gold values were reported. Drill core assays of up to 0.01 (oz/ton?) Au and 0.87% Cu were reported. The claims lapsed in June 1978.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper

0304J

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1986, Meadow Lark 1, 2 (W 51206, 9) were staked for Quiet Bay Minerals Corp. by Allen McKenzie (assisted by Norman McKenzie and Mike Day). The claims were transferred to Quiet Bay Resources Ltd. in 1987, and were cancelled in 1989. This area was also covered from 1987 to 1988 by Permit 89 (acreage 10 984 ha), which was granted to Noranda Exploration Company, Limited.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91801, 92263.
 - b) Mining Recording Files; File No. 23060 (IXL No. 12).
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake-Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4059G, Wass Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.

NAME OF PROPERTY
IXL Group

N.T.S. AREA 53E/11 NW

FILE NO. 296
REF. AU 1

MAP REFERENCES

Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map, Island Lake-Red Sucker Lake area (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
Preliminary Map 1985 B-1, Knight Lake-Wass Lake, (Geology), Scale 1:20 000, by K.L. Neale, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series NW 11, 53E, Scale 1:31 680, circa 1937, Mining Recording, Manitoba Mines Branch.

REMARKS

Two deposits of pyrite are shown on Map 26-1960, one is about 0.8 km east of IXL, on Clam Lake, the other is 3.2 km southeast.

Comp./Rev.		CC	JR	PA
By Date	02-61	02-74	08-87	06-90



PRODUCT GOLD

H.T.S. AREA 53E/11 NW

REF. AU 2

NAME OF PROPERTY

Wass Lake

OWNER OR OPERATOR AND ADDRESS

1990-Noranda Exploration
Company, Limited
4-2130 Notre Dame Ave.
Winnipeg, Manitoba
R3H 0K1

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 40'

Long. 95° 21'

UNCERTAINTY: 300 m

Sec.

Tp. 54

R. 15 EPM

DESCRIPTION OF DEPOSIT

Quinn (1960, Map 26-1960) located a gold-occurrence just north of the northeast part of Wass Lake. The area is underlain by Precambrian Hayes River Group felsic volcanic and hypabyssal rocks, porphyritic dacite and rhyolite, tuff and tuff breccia, albitic schists and gneiss derived from felsic volcanic rocks (Geological Survey of Canada, Map 1646A).

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960 H.A. Quinn noted an occurrence of gold north of the east end of Wass Lake on Map 26-1960. The deposit is located about 233 km southeast of the Hudson Bay railway line.

In 1970-71, an airborne geophysical survey was carried out by Geotrex Limited for Amax Exploration, Inc. in the Reservation 96 area. This was followed up with a vertical loop and a horizontal loop electromagnetic survey in 1972 (Non-confidential Assessment File No. 91801).

In March 1976, Manitoba Mineral Resources Ltd. (MMR) staked CB 6827 over the property and carried out linecutting, geophysical surveys and diamond drilling. Hole 146-10, drilled to test a southeast-trending EM anomaly near the Wass Lake occurrence, intersected andesite tuff, rhyolite, iron formation and dacite tuff. The volcanics contained some sections with disseminated and stringer sulphides; however assays yielded only trace amounts of gold (up to 3.43 g/t (0.1 oz/ton) Au in ddh 146-8) and trace to 0.02% copper (Non-confidential Assessment File No. 92263). The claim lapsed in 1978.

Noranda Exploration Company, Limited staked Stone 75 (W48360) over the property in 1983, and did some geological mapping. The claim was cancelled in 1985.

Quiet Bay Minerals Corp. staked Joyfull Day (W 51216) in 1986, and transferred the claim to Quiet Bay Resources Ltd. in 1987. MMR's drill core was resampled and relogged that year: up to 1.71 g/t (0.05 oz/ton) Au was reported for ddh 146-7, 0.34 g/t (0.01 oz/ton) Au for ddh 146-10. In 1988, the Company carried out geological mapping, prospecting, rock sampling and geophysical (VLF-EM and Mag) surveys. A rock sample collected from the ddh 146-8 area returned 1.23 g/t (0.036 oz/ton) Au (Non-confidential Assessment File No. 92899). The claim was cancelled in September 1989.

0305J

- 1 -

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

This area was also covered from 1987 to 1988 by Permit 89 (acreage 10 984 ha), which was granted to Noranda Exploration Company, Limited. In October 1989, Noranda Exploration Company, Limited staked Toad 4 (W 49739) over the property.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91801, 92263, 92899.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.
- Turek, A. and Weber, W., 1987, U-Pb zircon geochronology of the Bigstone Lake-Knight Lake area; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1987, p. 148-150.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4059G, Wass Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).

NAME OF PROPERTY
Wass Lake

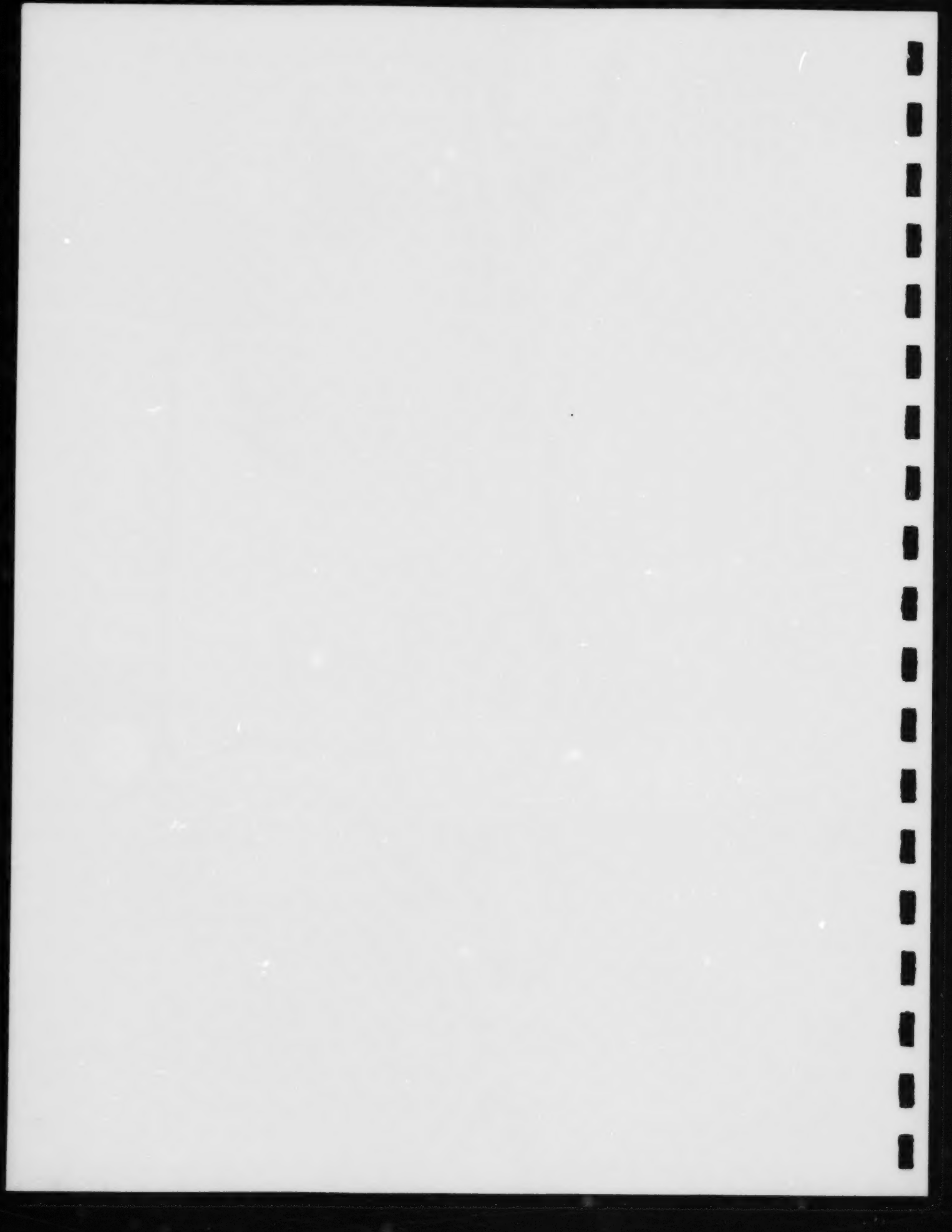
N.T.S. AREA 53E/11 NW

FILE NO. 297
REF. AU 2

MAP REFERENCES cont'd

Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
#Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Preliminary Map 1985 B-1, Knight Lake-Wass Lake, (Geology), Scale 1:20 000, by K.L. Neale, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

Comp./Rev.		CC	JR	PA
By Date	2-61	2-74	09-87	06-90



PRODUCT Copper

H.T.S. AREA 53E/11 NW

REF. CU 1

NAME OF PROPERTY

WNB Nos. 8, 9; PC Nos. 1, 2, 3

OWNER OR OPERATOR AND ADDRESS

1990-Noranda Exploration
Company, Limited
4-2130 Notre Dame Ave.
Winnipeg, Manitoba
R3H 0K1

OBJECT LOCATED -cp showing

Mining Division Winnipeg

Lat. 53° 42.23'

Long. 95° 23.49'

UNCERTAINTY: 1000 m

Sec.

Tp. 54, 55

R. 14, 15 EPM

DESCRIPTION OF DEPOSIT

Pyrrhotite, chalcopyrite, and sphalerite are found as disseminated grains, and fracture and shear fillings in Precambrian andesite of the lower Hayes River Group. Little or no nickel was detected in the pyrrhotite (Non-confidential Assessment File No. 91147).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on a peninsula in Knight Lake in the Bigstone Lake area, which is 225 km southeast of the Hudson Bay railway line.

It was staked in 1948 by W.R. Anderson and G.E. Moore as Gem Nos. 1-3, 10-12 (W 16517-19, 26-28) and as PC Nos. 1-3 and WNB Nos. 8, 9 (W 19582-4, 80, 81), in 1953 by W.N. Baker and P. Chorney. Joe Nos. 1, 2 (W 19962, 63) were also staked in 1953 by Phil Smerchanski. Sand River Gold Mining Company, Limited, which was exploring the Knight Lake area, reported finding two sulphide zones, 366 m (1200 ft) apart, which gave interesting nickel-copper-zinc values. In 1953, Sand River Gold Mining Company, Limited diamond drilled 275 m (903 ft) in 14 holes and did some geological mapping (scale 1:2400) (Non-confidential Assessment File No. 91147).

The area was restaked as Moe Nos. 2-4, 6-8, 10-14 (W 37080-83, 85-87, 89-93) by M. Beaudoin in 1964 and assigned to Consolidated Northland Mines Limited which allowed the claims to lapse the following year.

In 1970-71, an airborne geophysical survey was carried out by Geoterrax Limited for Amax Exploration, Inc. in the Reservation 96 area. This was followed up with ground geophysical surveys in 1971 and diamond drilling in 1972 (Non-confidential Assessment File No. 91801). Hole MX96-72-4, drilled 600 m southeast (near former Joe 2 claim), intersected massive sulphides (pyrite, some pyrrhotite) from 24 to 52 m (79-171 ft) and returned up to 0.02% Cu, trace Zn in assays; Hole MX96-72-5, drilled on the south part of the former WNB 8 claim, intersected 0-60% pyrrhotite from 5 to 17 m (16-58 ft) and returned up to 0.03% Zn, 0.04% Cu, and possibly Ag (?).

Associated minerals or products of value
Zinc, nickel.

1908 '0'

- 1 -

NAME OF PROPERTY

WNB Nos. 8, 9; PC Nos. 1, 2, 3 N.T.S. AREA 53E/11 NW

FILE NO. 298**REF. CU 1**

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Ermanovics et al. (1975) did some sampling at Knight Lake: about 400 m southeast of this area (former Joe 2 claim), one sample (#18) returned up to 4110 ppm Cu.

In 1976, Manitoba Mineral Resources Ltd. (MMR) staked CB 6837, CB 6862 over the property and carried out linecutting, EM-17 geophysical surveys and diamond drilling (Non-confidential Assessment File No. 92263). Four holes drilled on CB 6837 (north part of the former WNB 8 claim) returned the following results:

- Hole 146-23: 3.83% Cu over 0.2 m (0.8 ft), up to 0.06% Ni; substantial widths of sulphide mineralization from 18 to 26.6 m and 48.4 to 82.8 m.
- Hole 146-25: up to 0.14% Cu, 0.05% Ni; disseminated sulphide mineralization intersected from 51.4 to 61.2 m and 65.3 to 85.7 m.
- Hole 146-16: up to 0.59% Cu over 0.52 m, up to 0.23% Zn, 0.07% Ni, trace Au; ubiquitous chalcopyrite throughout a 15.5 m section of mineralized core at a drill depth of 42.5 m.
- Hole 146-24: up to 0.2% Cu, trace Au; well mineralized to solid pyrrhotite, trace to 1% chalcopyrite intersected from 46.7 to 52.4 m.

(Non-confidential Assessment File No. 92263)

The claims lapsed in 1978.

Noranda Exploration Company, Limited staked Stone 62, 63 (W48373, 72) over the property in 1983, and did some geological mapping. In 1985, Stone 62 was restaked as Dash 4 (W 51098) by Noranda. The area was also partly covered from 1987 to 1988 by Permit 89 (acreage 10 984 ha) which was granted to Noranda.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91147, 91801, 92263.
 - b) Corporation Files; Sand River Gold Mining Company, Limited
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.

NAME OF PROPERTY

WNB Nos. 8, 9; PC Nos. 1, 2, 3

N.T.S. AREA 53E/11 NW

FILE NO. 298

REF. CU 1

REFERENCES cont'd

- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponaak, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.
- Turek, A. and Weber, W., 1987, U-Pb zircon geochronology of the Bigstone Lake-Knight Lake area; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1987, p. 148-150.

MAP REFERENCES

- Map 53E, Island Lake, (Topographic), Sc. 1:250 000, Mines & Technical Surveys, Canada.
- *Map 4059G, Wass Lake, (Aeromagnetic), Sc. 1:63 360, Manitoba Mines Branch & Geological Survey of Canada..
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 B-1, Knight Lake-Wass Lake, (Geology), Scale 1:20 000, by K.L. Neale, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NW 11, 53E, Sc. 1:31,680, Circa 1956, Mining Recording, Manitoba Mines Branch.

REMARKS

Exploration history also covers an area to the north of Quinn's chalcopryrite showing.

NAME OF PROPERTY

WNB Nos. 8, 9; PC Nos. 1, 2, 3

N.T.S. AREA 53E/11 NW

FILE NO. 298

REF. CU 1

REMARKS cont'd

Several other occurrences of sulphides have been observed in the Knight Lake area, as indicated on Map 26-1960.

A sample from a large island to the west returned 1.37 g/t (0.04 oz/ton) Ag, 0.02% Zn, 0.02% Ni, trace Pb, 0.68% Cu (Ermanovics et al., 1975); drill core from a small island, west of this island, returned up to 1.57% Cu, 0.09% Zn in assays (ddh 142-1, Non-confidential Assessment File No. 92256).

Sphalerite was reported in drill core from an area 1.92 km south (ddh 146-19, Non-confidential Assessment File No. 92263). Up to 830 ppm Cu, 0.115 (oz/ton?) Au was reported for a sample near this area (Ermanovics et al., 1975).

Comp./Rev.

CC

PA

By Date

02-61

02-74

06-90

PRODUCT Copper

H.T.S. AREA 53E/11 NW

REF. CU 2

NAME OF PROPERTY
Clam Lake NorthOWNER OR OPERATOR AND ADDRESS
1990- Open

OBJECT LOCATED -cp, po showing

Mining Division Winnipeg

Lat. 53° 44'

Long. 95° 19'

UNCERTAINTY: 1000 m

Sec.

Tp. 55

R. 15 EPM

DESCRIPTION OF DEPOSIT

An occurrence of copper (chalcopyrite and pyrrhotite) shown on Map 26-1960, about 2.4 km north of Clam Lake, occurs in basic to intermediate volcanic rocks of the Precambrian Hayes River Group.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960, H.A. Quinn noted an occurrence of copper (chalcopyrite and pyrrhotite) about 2.4 km north of Clam Lake (Map 26-1960). This lake is located in the Bigstone Lake area which is about 225 km southeast of the Hudson Bay railway line.

In 1970-71, an airborne geophysical survey was carried out by Geoterrex Limited for Amax Exploration, Inc. in the Reservation 96 area (Non-confidential Assessment File No. 91801).

In 1976, Manitoba Mineral Resources Ltd. staked CB 6838 over the property and carried out linecutting, EM-17 geophysical surveys and diamond drilling. Hole 146-15 intersected 2-10% pyrrhotite stringers, trace chalcopyrite from 29 to 35 m (96.6 - 113.9 ft) and returned up to 0.03% Cu in drill core assays; Hole 146-22 intersected several sections of rhyodacite tuff with 1-5% pyrrhotite, trace to 1% pyrite and returned up to 0.06% Cu in assays (Non-confidential Assessment File No. 92263). The claim lapsed in 1978.

Noranda Exploration Company, Limited staked Stone 71 (W 48364) over the property in 1983, and did some geological mapping and rock sampling. Samples taken from the west part of the claim area returned up to 30 ppb Au (Sample #1292) and up to 220 ppm Zn (Sample #1295) in assays. The claim lapsed in 1985.

This area was briefly covered from 1987 to 1988 by Permit 89 (acreage 10 984 ha), which was granted to Noranda Exploration Company, Limited.

Associated minerals or products of value

NAME OF PROPERTY
Clam Lake North

N.T.S. AREA 53E/11 NW

FILE NO. 299
REF. CU 2

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Manitoba Mines Branch:
a) Non-confidential Assessment Files; File Nos. 91801, 92263.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines & Technical Surveys, Canada.
- Map 4059G, Wass Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 B-1, Knight Lake-Wass Lake, (Geology), Scale 1:20 000, by K.L. Neale, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

NAME OF PROPERTY
Clam Lake North

N.T.S. AREA 53E/11 NW

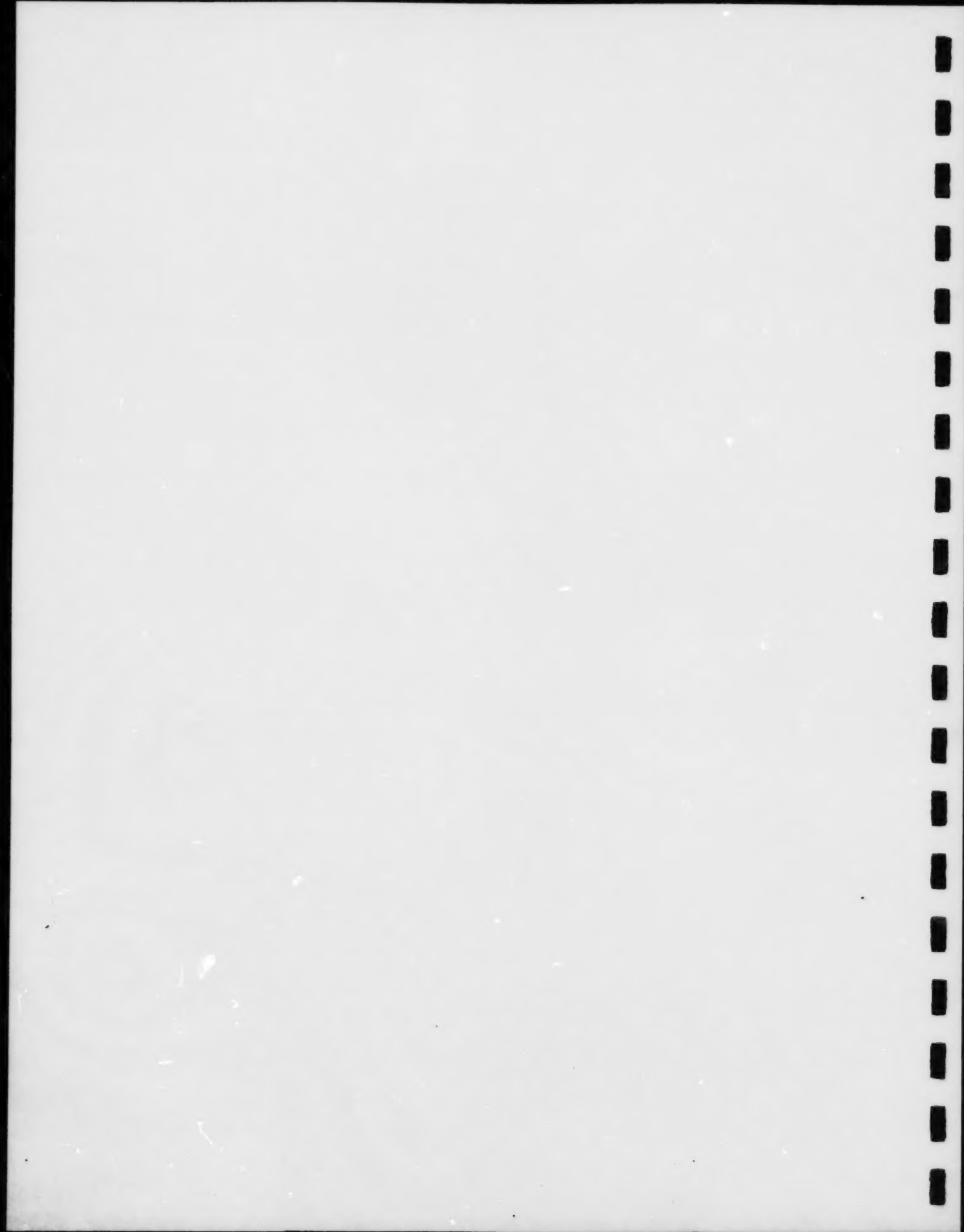
FILE NO. 299
REF. CU 2

REMARKS

A soil geochemical anomaly of copper and silver was reported 2.76 km WSW of this area; drill core (MX96-72-6) from this area returned trace zinc over 3.9 m (Non-confidential Assessment File No. 91801).

A drill hole (MX96-72-7), 1.64 km SSW of this area, returned trace zinc over 6.1 m (Non-confidential Assessment File No. 91801).

Comp./Rev.	CC	PA
By Date	02-74	06-90



PRODUCT Copper

N.T.S. AREA 53E/11 NW

REF. CU 3

NAME OF PROPERTY

Knight Lake

OWNER OR OPERATOR AND ADDRESS

1990-Noranda Exploration
Company, Limited
4-2130 Notre Dame Ave.
Winnipeg, Manitoba
R3H 0K1

OBJECT LOCATED Locality #8

Mining Division Winnipeg

Lat. 53° 42.65'

Long. 95° 26.5'

UNCERTAINTY: 500 m

Sec.

Tp. 54

R. 14 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia, correlative amphibolitic schist and gneiss (Map 1646A). A sample of schisted dacite with a 1.27 cm thick layer of sulphide mineralization returned 2.55% Cu and trace amounts of Au, Ag, Pb, Zn, Ni.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the tip of a peninsula in the north central part of Knight Lake. It is 6.7 km west of Clam Lake, 2.9 km northeast of the northwest end of Wass Lake, and 225 km southeast of the Hudson Bay railway line.

In 1970-71, an airborne geophysical survey was carried out by Geoterrex Limited for Amax Exploration, Inc. in the Reservation 96 area (Non-confidential Assessment File No. 91801).

Ermanovics et al. (1975) collected some samples from the area: a rock sample of schisted dacite with 1.27 cm (0.5 inch) thick sulphide mineralization returned 0.34 g/t (0.01 oz/ton) Au, 2.74 g/t (0.08 oz/ton) Ag, 2.55% Cu, trace Pb, Zn, Ni; another sample of porphyritic dacite with disseminated sulphides returned trace Au, Pb, 0.02% Zn, 0.02% Ni, 0.04% Cu.

CB 6708 and CB 6709 were staked by the Manitoba Government in 1975. In 1975-76, linecutting, EM-17 geophysical surveys, diamond drilling, geological mapping and bedrock sampling was carried out (Non-confidential Assessment File No. 92256). One hole (ddh 142-3), drilled 160 m south of this area, intersected dacite (with 5% graphite, pyrite, and minor chalcopyrite), dacitic tuff, andesite, and two sections of solid graphite (50%) (with up to 15% pyrite and less than 0.5% chalcopyrite). Drill core assays of up to 0.11% Zn, 0.06% Cu were returned. On the eastern tip of the peninsula (475 m east), a sample (45-76-0659) returned 0.27% Cu. The claim blocks were cancelled in 1978.

Noranda Exploration Company, Limited staked Stone 54 (W 48381) over the property in 1983, and restaked the claim as Dash 2 (W 51096) in 1985.

Associated minerals or products of value
gold, nickel, silver, lead.

1946 '01

- 1 -

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-316.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91801, 92256.
 - b) Unpublished Information Files; 53E/11
- McGregor, C. and Petak, H.W., 1976, Knight Lake (53E/11 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 60-61.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponaask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.
- Turek, A. and Weber, W., 1987, U-Pb zircon geochronology of the Bigstone Lake-Knight Lake area; in Manitoba Energy and Mines, Minerals Division, Report of Field Activities, 1987, p. 148-150.

MAP REFERENCES

- Map 53E, Island Lake, (Topographic), Scale 1:250 000, Mines & Technical Surveys, Canada.
- Map 4059G, Wass Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch & Geological Survey of Canada..
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).

NAME OF PROPERTY
Knight Lake

N.T.S. AREA 53E/11 NW

FILE NO. 1027
REF. CU 3

MAP REFERENCES cont'd

Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Preliminary Map 1985 B-1, Knight Lake-Wass Lake, (Geology), Scale 1:20 000, by K.L. Neale, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
*Claim Map Series NW 11, 53E, Sc. 1:31,680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

Locality #8 is from Ermanovics et al. (1975).

About 2 km ESE, on CB 6708, a drill core assay of 1.57% Cu was reported (53E/11 CU 1, remarks).

About 1.6 km SE, a sample (45-76-0627) returned 750 ppm Cu, 36 ppm Zn (Non-confidential Assessment File No. 92256).

On the south shore of Knight Lake, 2.4 km SSE, bornite was noted in mudstone (Ermanovics et al., 1975).

About 1.96 km SW, ddh B-5 intersected 21 m (67.1 ft) of talc chlorite-sericite schist at a depth of 9 m (30 ft) (Non-confidential Assessment File No. 92302).

Comp./Rev.	PA
By Date	07-90



PRODUCT GOLD

M.T.S. AREA 53E/12 NE

REF. AU 1

NAME OF PROPERTY

Mainland River

OWNER OR OPERATOR AND ADDRESS

1990-W. Bruce Dunlop Limited
(N.P.L.)
201-2639 Portage Avenue
Winnipeg, Manitoba
R3J 0P7

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 43.71'

Long. 95° 33'

UNCERTAINTY: 1000 m

Sec.

Tp. 55

R. 13 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Island Lake Group conglomerate, quartz wacke, siltstone, turbiditic greywacke and argillite that overlies Hayes River Group felsic volcanic and hypabyssal rocks (Geological Survey of Canada, Map 1646A). Quinn (1960, Map 26-1960) located three gold occurrences in this area: the first is on the north side of the river, the second is just south of the river (the one used as the reference point), and the third is located midway between the occurrence on the south side of the river and the Diamond Queen No. 1 (53E/12 AU 2) occurrence.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit (second gold showing) is located near the east end of Bigstone Lake, just south of the Mainland River, which is approximately 225 km southeast of the Hudson Bay railway line. The third gold showing is also located south of the river, about 2 km southwest of the second showing. The first showing is on the north side of the river (Map 26-1960).

The first area to be explored was the third showing area which was held under 'The Mall 3 (W 819)' from 1932 to 1934 by A.D. Johnston.

The area was extensively staked in 1946-47 under B.B. 6, 8 (W 14832, 34) (second gold showing), G.P. 7 (W 15363) (third gold showing), and H.S. 4 (W 15790) (first gold showing). Work was reported on these claims in 1948. The claims were cancelled in 1950-51.

Visible gold was found in some quartz veins but 2195 m (7200 ft) of diamond drilling by San Antonio Gold Mines Limited failed to intersect significant mineralization.

In 1964, the area was staked under Bin Nos. 6, 7 (W 37067, 68) (second gold showing), Bin No. 18 (W 37079) (third showing), and Hat No. 1 (W 37044) (first gold showing). The claims were transferred to Consolidated Northland Mines Limited that year, and were cancelled in 1965.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, lead, zinc.

0306J

- 1 -

NAME OF PROPERTY
Mainland River

N.T.S. AREA 53E/12 NE

FILE NO. 300
REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1970-71, an airborne EM/Mag survey was flown over parts of this area by Geotrex Limited for Amax Exploration, Inc. (Non-confidential Assessment File No. 91800). In 1972-1977, the third showing (south of the River) was held under CB 5293 by J. Ziyone who reported some work in 1973. An airborne Input/Mag survey was done by Questor Surveys Limited for Manitoba Mineral Resources Ltd. (MMR) in February 1977 (Non-confidential Assessment File No. 92273).

In September 1977, CB 7948 and CB 7936 were staked by MMR over the second and first gold showings, respectively. A ground electromagnetic (horizontal loop, EM-17) survey was done by MMR on the south side of the river (CB 5293, 7948) in the winter of 1978 (Non-confidential Assessment File No. 92273). Prospecting and sampling was carried out in September 1978. In 1979, four holes totalling 246 m (808 ft) were drilled on CB 7948:

- DDH B-33: intersected several sections of 10-75% pyrrhotite and pyrite, trace chalcopyrite and returned up to 0.2% Cu in assays.
- DDH B-38: intersected dacite tuff with trace pyrite, pyrrhotite from 32 to 43 m (105.5 to 142 ft) including two sections of 20% pyrite, pyrrhotite in solid sections and fracture fillings.
- DDH B-34 (900 m southeast of gold showing):
intersected a total of 2.4 m (8 ft) of fine grained rhyolitic material containing pyrite, pyrrhotite, trace chalcopyrite, sphalerite.
- DDH B-35 (800 m east-southeast of gold showing):
intersected intermediate to mafic tuff and felsic to intermediate volcanics with minor disseminated pyrrhotite and pyrite throughout the 6-81 m (20-266 ft) section; trace chalcopyrite, sphalerite and 0-5% marcasite reported in drill core. Drill core assays of up to 0.28% Zn, 0.24% Cu were reported.

(Non-confidential Assessment File No. 92302).

On the north side of the river, three holes were drilled in the CB 7936 area: trace galena, sphalerite, and chalcopyrite, and magnetite bands were observed in some of the drill core. CB 7948, 7936 lapsed in December 1979.

Following is a summary of claims recently staked over the second and first gold showings, respectively:

- 1980-81: CB 13290 (Stone 7), CB 13287 (Stone 13) staked by W. Bruce Dunlop Limited (N.P.L.)
- October 1983 claims lapsed. Big 8 (W 48884), Big 5 (W 48881) staked by W. Bruce Dunlop Limited (N.P.L.)
- January 1986 claims lapsed. Bigstone 9 (W 49533), Bigstone 5 (W 49529) staked by W. Bruce Dunlop Limited (N.P.L.)
- March 1986 transferred to Noranda Exploration Company, Limited
- March 1987 transferred to W. Bruce Dunlop Limited (N.P.L.)

The third showing (south side of the river) was staked under CB 13291 (Stone 8) by W. Bruce Dunlop Limited (N.P.L.) in 1981. The claim was transferred to Noranda Exploration Company, Limited in 1983, and back to W. Bruce Dunlop Limited (N.P.L.) in 1987.

0306J

NAME OF PROPERTY

Mainland River

N.T.S. AREA 53E/12 NE**FILE NO.** 300**REF.** AU 1

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91800, 92273, 92302.
 - b) Corporation Files; Manitoba Mineral Resources Ltd. (Annual Reports 1975-1976; 1976-1977).
 - c) Mining Recording Files; File Nos. 39496, 98 (B.B. 6, 8); No. 37187 (G.P. 7); No. 37512 (H.S. 4);
 - d) Annual Report on Mines and Minerals; 19th-p. 69.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1984, Bigstone Lake Project; in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
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- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).

NAME OF PROPERTY
Mainland River

N.T.S. AREA 53E/12 NE

FILE NO. 300
REF. AU 1

MAP REFERENCES cont'd

Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
#Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardaley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series NE 12, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

REMARKS

Drill holes were drilled on NB No. 1, RD Nos. 5, 7 and HS No. 6 in 1948, by San Antonio Gold Mines Limited.

Comp./Rev.	CC	JR	PA
By Date	2-74	09-87	06-90

PRODUCT GOLD

N.T.S. AREA 53E/12 NE

REF. AU 2

NAME OF PROPERTY

Diamond Queen Group

OWNER OR OPERATOR AND ADDRESS

1990-W. Bruce Dunlop Limited
(N.P.L.)
201-2639 Portage Avenue
Winnipeg, Manitoba
R3J 0P7

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 42.49'

Long. 95° 35.2'

UNCERTAINTY: 500 m

Sec.

Tp. 54

R. 13 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia, correlative amphibolitic schist and gneiss. The occurrence consists of a blue to white quartz vein that strikes northwest, dips 80° northeast, has a known strike length of 457 m (1500 ft) and varies in width from a few centimetres (inches) to 0.9 m (3 ft). The quartz contains disseminations of pyrite and chalcopyrite. Diamond drilling intersected a second vein, which is "very narrow", has a strike length of 53 m (175 ft) and consists of blue quartz with pyrite, galena and locally visible gold.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the east shore of Bigstone Lake, north and west of Reahil Bay, which is approximately 225 km southeast of the Hudson Bay Railway.

The history of staking is as follows:

Year	Claim Name	Claim Number	Staker
1932	Diamond Queen No. 1	W 713	G.A. Paulson per J.G. Reahil
	-1932 - assigned - J.A. Reahill)		
	- H.S. Cowan)	10% int.	
	- T. Lindsley)	90% int.	
1934	Diamond Queen No. 1	W 5319	H. Constable
	-1936 - assigned - J.G. Reahil		
1936	Diamond Queen No. 7	W 7211	J.G. Reahil
	-1936 - assigned - Fred Lam		
1946	S.D. Nos. 1, 4, 5, 6	W 14131, 4-6	O. Dickson
1947	S.D. Nos. 1, 4, 5, 6	W 15657, 60-2	O. Dickson
1964	Dee Nos. 7, 8, 9	W 37032-4	J. Duncan
	-1964 - assigned - Consolidated Northland Mines Limited.		
1972	CB 4445		J. Ziyone

Work was recorded on Diamond Queen No. 1 (W 713), Diamond Queen No. 1 (W 5319), 7 (W 7211), S.D. Nos. 1, 4, 5, 6 (W 15657, 60-2) and CB 4445.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, lead

NAME OF PROPERTY

Diamond Queen No. 1

N.T.S. AREA 53E/12 NE

FILE NO. 301

REF. AU 2

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1936, 95 m³ (3360 cu ft) of trenching was done in clay and 51 m (1800 cu ft) in solid rock in 25 small pits on Diamond Queen No. 1. This exposed a vein for a length of 457 m (1500 ft). The next year, 31 m³ (1080 cu ft) of trenching was done. "A mining operation....is planned (on this group of claims). Minimum average assays indicate something over \$13 per ton." (Financial Post, March 21, 1937). In 1938, 735 m (2411 ft) of diamond drilling was done by God's Lake Gold Mines Limited to explore two veins on Diamond Queen M.C. and Nos. 1, 6. Twelve holes were drilled on the main vein and five holes on the smaller vein to the north. Maximum assays were 3.1 g (0.09 oz) gold across 0.8 m (2.8 ft) (Non-confidential Assessment File No. 91148).

In 1970-71, an airborne EM/Mag survey was flown over parts of this area by Geotrex Limited for Amax Exploration, Inc. (Non-confidential Assessment File No. 91800). In 1972, 86 m³ (3036 cu ft) of rock was removed from 10 pits on CB 4445.

In 1976-1978, Manitoba Mineral Resources Ltd. (MMR) took out Permit 19. An airborne Input/Mag survey was done over part of the area by Questor Surveys Limited for MMR in February 1977 (Non-confidential Assessment File No. 92273). MMR did some sampling south of this area in 1978 (Non-confidential Assessment File No. 92302; Mineral Inventory card 53E/12 ZN 2).

In July 1981, W. Bruce Dunlop Limited (W.P.L.) staked CB 13291, 94 (Stone 8, 11) over the occurrence and in September 1983 transferred ownership to Noranda Exploration Company, Limited. Mapping, geochemical and geophysical survey work, and a six-hole 621 m drill program was carried out in 1986. The claim blocks were transferred back to W. Bruce Dunlop Limited (W.P.L.) in 1987.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Financial Post, March 20, 1937.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-395.
- Manitoba Mines Branch:
- a) Mining Recording Files; File No. 21898 (Diamond Queen No. 7) ; File No. 70498 (CB 4445);
 - b) Non-confidential Assessment Files; File Nos. 91148, 91800, 92273, 92302.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 11-12.
- Neale, K.L., 1984, Bigstone Lake Project (53E/parts of 12NW and NE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.

NAME OF PROPERTY
Diamond Queen No. 1

N.T.S. ARRA 53E/12 NE

FILE NO. 301
REF. AU 2

REFERENCES cont'd

- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16, 48.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponaak, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NE 12, 53E, Scale 1:31 680, circa 1938, Mining Recording, Manitoba Mines Branch.
- 0307J

NAME OF PROPERTY

Diamond Queen No. 1

N.T.S. AREA 53E/12 NE**FILE NO. 301****REF. AU 2**

REMARKS

1. According to McIntosh (1941) and old claim maps, the occurrence is in the Diamond Queen No. 9 (W 8987) area, which was later staked under S.D. No. 8 (W 14138), Dee No. 15 (W 37040), and (currently) CB 13294 (Stone 11).
2. Up to 8.1% Zn was reported southwest of this area (Neale, 1985). See 53E/12 ZN 2.

Comp./Rev.**CC****JR****PA****By Date****2-74****09-87****06-90**

PRODUCT Zinc

N.T.S. AREA 53E/12 NE

REF. ZN 1

NAME OF PROPERTY

CB 7506

OWNER OR OPERATOR AND ADDRESS

1990-W. Bruce Dunlop Limited
(N.P.L.)
201 - 2639 Portage Ave.
Winnipeg, Manitoba
R3J 0P7

OBJECT LOCATED drill hole (B-18)

Mining Division Winnipeg

Lat. 53° 44.33'

Long. 95° 36.08'

UNCERTAINTY: 300 m

Sec.

Tp. 55

R. 13 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Island Lake Group rocks: conglomerate, quartz wacke (regolith), siltstone, turbiditic greywacke and argillite, andesite flows, tuff, and agglomerate, minor basalt, siltstone and conglomerate (Map 1646A). Drill hole B-18 intersected andesite, quartz feldspar porphyry, and some sections of well-mineralized graphite. Andesite with 4-5% pyrrhotite in solid bands and disseminated form, and 3-4% sphalerite mainly in one solid 5 cm (2 inch) wide band, and trace pyrite and chalcopyrite, was reported at drilled depths of 37.5 to 38.6 m (Non-confidential Assessment File No. 92302).

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located near the northeast part of Bigstone Lake, 7 km northwest of Wapus Lake, 4 km northwest of Knight Lake and 225 km southeast of the Hudson Bay railway line.

In 1947, Lucky No. 2 (W 15847) was staked by G. Williams and G.C. No. 14 (W 15786) was staked by G.J. Clarke. No work was reported on Lucky 2 and the claim was cancelled in 1948. G.C. 14 was grouped with N.B., G.P., D.C., R.D., G.C. and H.S. claims in 1948 and work was reported that year. G.C. 14 was cancelled in 1950.

In 1970-71, an airborne EM/Mag survey was carried out by Geoterrex Limited for Amax Exploration, Inc. in the Reservation 95 area (Non-confidential Assessment File No. 91800).

In 1976, Manitoba Mineral Resources Ltd. (MMR) took out Permit 19 over the property. In 1977, MMR staked CB 7506 and carried out linecutting and EM-17 geophysical surveys (Non-confidential Assessment File No. 92273). Permit 19 was cancelled in 1978. In 1979, three holes were drilled on CB 7506 (Non-confidential Assessment File Nos. 92302, 92191). Drill hole B-18, drilled north at -45° to a depth of 56.7 m, returned a drill core assay of 3.6% Zn, 0.05% Cu over 1 m (3.5 ft) at a depth of 37 m (123 ft). CB 7506 was cancelled that year.

Associated minerals or products of value
copper.

1950 '0'

- 1 -

NAME OF PROPERTY
CB 7506

N.T.S. AREA 53E/12 NE

FILE NO. 1028
REF. ZN 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1981, W. Bruce Dunlop Limited (N.P.L.) staked the area under CB 13286, CB 12732 (Stone 12, 16). Some prospecting was carried out in 1983 on CB 12732 (Stone 16) (Non-confidential Assessment File No. 92627). CB 13286 (Stone 12) was restaked as Big 4 (W 48880) in 1983. CB 12732 (Stone 16) was cancelled in 1985. Big 4 (W 48880) was cancelled in 1986.

The area was restaked as Bigstone 4, 7 (W 49528, 31) by W. Bruce Dunlop Limited (N.P.L.) in 1985. The claims were transferred to Noranda Exploration Company, Limited in 1986 and back to W. Bruce Dunlop Limited (N.P.L.) in 1987. Bigstone 4 was cancelled in 1990.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Mining Recording Files; File No. 37508 (G.C. 14).
 - b) Non-confidential Assessment Files; File No. 91800, 92191, 92273, 92302, 92627.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1984, Bigstone Lake Project (53E/parts of 12 NW and NE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-8.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.

NAME OF PROPERTY
CB 7506

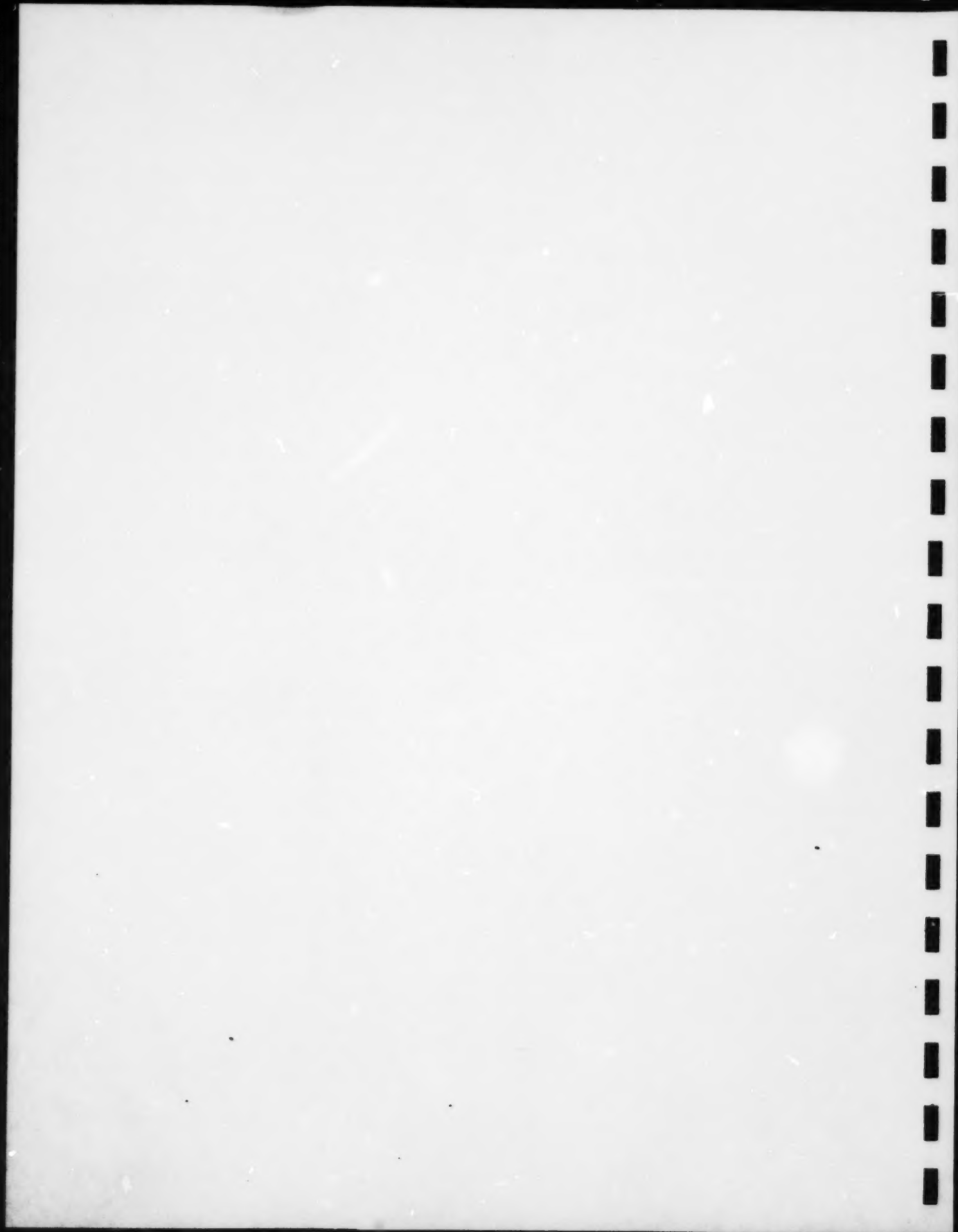
N.T.S. AREA 53E/12 NE

FILE NO. 1028
REF. ZN 1

MAP REFERENCES

- Map 53E, Island Lake, (Topographic), Scale 1:250 000, Mines & Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch & Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Map 149-4C, Block 2, Bigstone West, (Property map and grids), Scale 1:15840; in Non-confidential Assessment File No. 92302, Manitoba Mines Branch.
- *Claim Map Series NE 12, 53E, Sc. 1:31,680, circa 1989, Mining Recording, Manitoba Mines Branch.

Comp./Rev.	PA
By Date	07-90



PRODUCT Zinc

H.T.S. AREA 53E/12 NE

REF. ZN 2

NAME OF PROPERTY
Bigstone Lake SoutheastOWNER OR OPERATOR AND ADDRESS
1990-W. Bruce Dunlop Limited
(N.P.L.)
201 - 2639 Portage Ave.
Winnipeg, Manitoba
R3J 0P7

OBJECT LOCATED Sample #773 (Neale, 1985)

Mining Division Winnipeg

Lat. 53° 42.03'

Long. 95° 36.7'

UNCERTAINTY: 250 m

Sec.

Tp. 54

R. 13 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia, correlative amphibolitic schist and gneiss (Map 1646A). High zinc values were reported to occur in plagioclase-quartz porphyries of the southeastern shore, at the contact between intermediate and mafic flow rocks (Neale, 1985).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the southeast shore of Bigstone Lake, 2.5 km northwest of Reahil Bay, 5.4 km southwest of Knight Lake and 225 km southeast of the Hudson Bay railway line.

The following stakings were recorded:

Year	Claim	Staker
1932	Mall No. 4 (W 820).	E.A. Jackson
	-Some work may have been done in 1933.	
	-cancelled in 1934.	
1932	Diamond Queen No. 8 (W 706)	Herbert S. Cowan
	Diamond Queen No. 9 (W 716)	Wilfred S. Mc Ewen
	-10% interest in the Diamond Queen 9 claim was assigned to James G. Reahil and Herbert S. Cowan, and 90% interest in both Diamond Queen 8, 9 was given to Thayer Lindsley in 1932.	
	-cancelled in 1933.	
1936	Diamond Queen No. 10 (W 7391)	Gordon Horner
	Diamond Queen No. 11 (W 7392)	J. Raymond Reahil
	-claims assigned to Fred Larn in 1937.	
	-cancelled in 1938.	
1938	Diamond Queen No. 21 (W 9024)	Fred Reahil for J.R. Reahil
	Diamond Queen No. 22 (W 9025)	
	-cancelled in 1939.	

Associated minerals or products of value
copper, lead, nickel.

NAME OF PROPERTY

Bigstone Lake Southeast

N.T.S. AREA 53E/12 NE

FILE NO. 1029

REF. ZN 2

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

<u>Year</u>	<u>Claim</u>	<u>Staker</u>
1947	V.G. 13, 14, 15 (W 15915, 16, 17)	Fred Baker
	V.G. 1, 4 (W 15906, 09)	N. Koval
	Bigstone No. 2 (W 15623)	A.S. Bellingham
	-cancelled in 1948.	
	-Quinn (1960) indicated a pyrite and a pyrite/chalcopyrite showing in this area.	
1964	Dee No. 18 (W 37043)	J. Duncan
	-assigned to Consolidated Northland Mines Limited in 1964.	
	-cancelled in 1965.	
1970	Reservation 95	Amax Exploration, Inc.
	-In 1970-71, an airborne EM/Mag survey was carried out by Geoterrax Limited for Amax Exploration, Inc. in the Reservation 95 area (Non-confidential Assessment File No. 91800). Ground geophysical (magnetic, VLF-EM, JEM and vertical loop EM) surveys were done on two grids (44, 45), south of the former Mall 4 and V.G. 4 claims, and magnetic conductors were found on both (Non-confidential Assessment File No. 91800).	
	-cancelled in 1973.	
1972	Gor 11-13, 15 (W 44053-55, 57)	K. Clemis
	-assigned to Amax Exploration Inc. one month later	
	-cancelled in 1974.	

The area was sampled by Ermanovics et al. (1975): a sample (#4) of massive pyrite in siltstone between basalt and andesite (former Mall 4 claim area) returned trace Au, Pb, Ni, Cu and 0.01% Zn. About 700 m northeast of this area (former Diamond Queen 10 area), a sample (#5) of mudstone with disseminated sulphides assayed 0.27% Pb, 0.56% Zn, 0.06% Ni, 0.04% Cu. About 1.4 km east-northeast (former Diamond Queen 11 area), a sample (#7) of siliceous greywacke containing disseminated sulphide mineralization returned an assay of trace Au, Cu, 0.04% Pb, 0.54% Zn, 0.02% Ni (Ermanovics et al., 1975).

Manitoba Mineral Resources Ltd. (MMR) took out Permit 19 over the property in 1976. In 1978, MMR staked CB 8469 and carried out linecutting, EM-17 geophysical surveys and prospecting (Non-confidential Assessment File Nos. 92302, 92273). About 700 m northeast (former Diamond Queen 10 area), a sample (#4054) assayed trace Au, Ag, 0.09% Cu, 0.46% Zn (Non-confidential Assessment File No. 92302). Permit 19 was cancelled in 1978. CB 8469 was cancelled in 1981.

Stone 10 (CB 13293) was staked by W. Bruce Dunlop Limited (N.P.L.) in 1981, and was transferred to Noranda Exploration Company, Limited in 1983. Neale (1985) reported an assay of 8.1% Zn, 62 ppm Cu, 1 ppm Ag, less than 2 ppm Pb, and trace Au for a sample of weakly silicified quartz porphyry (from the former Mall 4 claim area). About 1.2 km northeast (former Diamond Queen 11 area), samples of plagioclase-quartz porphyry returned 0.10% Zn and 0.15% Zn; a sample of a massive pyrite layer near the same area returned 184 ppm Zn (Neale, 1985). The claim block was transferred back to W. Bruce Dunlop Limited (N.P.L.) in 1987.

NAME OF PROPERTY
Bigstone Lake Southeast

N.T.S. AREA 53E/12 NE

FILE NO. 1029
REF. ZN 2

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Mining Recording Files; File Nos. 13793 (The Mall 4); Nos. 37555, 58, 64-66 (V.G. 1, 4, 13-15); Nos. 70451-53, 55 (Gor 11-13, 15); No. 37405 (Bigstone 2); Nos. 22146, 47 (Diamond Queen 10, 11); No. 62610 (Dee No. 18).
 - b) Non-confidential Assessment Files; File No. 91800, 92191, 92273, 92302.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1984, Bigstone Lake Project (53E/parts of 12NW and NE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.
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- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-16.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponaak, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.

MAP REFERENCES

- Map 53E, Island Lake, (Topographic), Scale 1:250 000, Mines & Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch & Geological Survey of Canada..

NAME OF PROPERTY
Bigstone Lake Southeast

N.T.S. AREA 53E/12 NE

FILE NO. 1029
REF. ZN 2

MAP REFERENCES cont'd

- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NE 12, 53E, Sc. 1:31,680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

1. About 1.8 km northeast, a sample (#4004) returned up to 0.1% Zn (Non-confidential Assessment File No. 92302).
2. About 1.3 km east, a sample (#4006) returned up to 3.4 g/t (0.1 oz/ton) Ag (Non-confidential Assessment File No. 92302).
3. Samples from the northwest shore of Bigstone Lake returned assays of up to 0.28% Zn and 4220 ppm Cu (#1, 14, Ermanovics et al., 1975; #441, 466, Neale, 1985; ddh B-23, Non-confidential Assessment File No. 92302; ddh MX95-72-1, Non-confidential Assessment File No. 91800).
4. About 2.4 km northwest, a drill hole (95-72-4) intersected 1.8 m (6 ft) of 0.19% Zn, 5.2 m (17 ft) of 0.08% Zn, 0.24% Cu (Non-confidential Assessment File No. 91800).

Comp./Rev.	PA
By Date	07-90

PRODUCT Zinc

N.T.S. AREA 53E/13 SW, NW

REF. ZN 1

NAME OF PROPERTY
Stevenson Lake ZincOWNER OR OPERATOR AND ADDRESS
1990-Open

OBJECT LOCATED Py, Zn, Sb showing

Mining Division Winnipeg

Lat. 53° 53.4'

Long. 95° 55.40'

UNCERTAINTY: 1000 m

Sec.

Tp. 56, 57

R. 11 EPM

DESCRIPTION OF DEPOSIT

The sphalerite-stibnite-pyrite deposit is located in Precambrian sediments of the Hayes River Group. The three occurrences of pyrite are located in granite and granodiorite.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960 H.A. Quinn noted a sphalerite-stibnite-pyrite deposit on the shore of a bay on the south side of Stevenson Lake (Map 26-1960). The deposit is about 200 km southeast of the Hudson Bay railway line. Three other pyrite deposits are located near the main deposit.

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area; in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-199.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Antimony, pyrite.

NAME OF PROPERTY
Stevenson Lake Zinc

N.T.S. AREA 53E/13 SW, NW

FILE NO. 308
REF. ZN 1

REFERENCES cont'd

- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.
- Weber, W. and Schledewitz, 1980, Molson Lake - Kalliecahoolie Project (63I/4, 6 to 8; 53L/1 to 8; 53K/3, 4); in Manitoba Mineral Resources Division, Report of Field Activities, 1980, p. 33-37.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

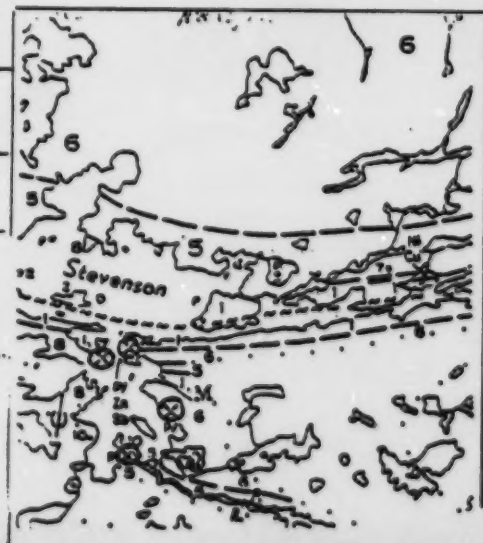
- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Survey, Canada.
- Map 4084G, Stevenson Lake East, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- *Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map 1985 I-2, Ogish Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

REMARKS

About 5.5 km east of this area, a sample returned 380 ppm Cu and 0.5 (ppm ?) Ag (Ermanovics et al., 1975).

Comp./Rev.	CC	PA
By Date	02-61	06-90

Taken from Map 26-1960.
Circles indicate occurrences
described on this card.



PRODUCT	Nickel	N.T.S. AREA 53E/13 NW	REF. NI 1
NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS		
Stevenson Lake Nickel	1990-Open		
OBJECT LOCATED	Ni, Cu showing	Mining Division Winnipeg	
Lat.	53° 55'	Long.	95° 47'
		UNCERTAINTY:	1000 m
Sec.		Tp.	57
		R.	12 EPM

DESCRIPTION OF DEPOSIT

The occurrence, as indicated on Map 26-1960, is a copper-nickel deposit on or near the contact between Precambrian sediments of the Hayes River Group and "mixed gneisses: ...intimate mixtures of sedimentary, volcanic, and granitic mixtures" (Quinn, 1960). Nickel and copper minerals are probably found in gabbro and diorite which may separate the sediments from the gneisses.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the north shore of the centre of Stevenson Lake, approximately 200 km southeast of the Hudson Bay railway line.

It was staked once as S.L. Nos. 2, 3 (W 15958, 59) by T. Lamb but no work was reported.

REFERENCES

- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-62.
- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area; in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-199.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper.

NAME OF PROPERTY
Stevenson Lake Nickel

N.T.S. AREA 53E/13 NW

FILE NO. 307
REF. NI 1

REFERENCES cont'd

- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.
- Weber, W. and Schledewitz, 1980, Molson Lake - Kalliecahoolie Project (63I/4, 6 to 8; 53L/1 to 8; 53K/3, 4); in Manitoba Mineral Resources Division, Report of Field Activities, 1980, p. 33-37.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4084G, Stevenson Lake East, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map 1985 I-2, Ogish Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

Comp./Rev.		CC	PA
By Date	02-61	02-74	06-90

PRODUCT	Copper	N.T.S. AREA 53E/13 NE	REF. CU 1
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NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS
Stevenson Lake Copper	1990 - Open

OBJECT LOCATED	cp, py showing	Mining Division	Winnipeg
Lat.	53° 54.46'	Long.	95° 42'
		UNCERTAINTY:	1000 m
Sec.		Tp.	57
		R.	12 EPM

DESCRIPTION OF DEPOSIT

The deposits are located in Precambrian volcanic rocks of the Hayes River Group. Deposit A is chalcopryite and pyrite. Deposit B is pyrite. According to Gilbert (1985), pyrite, pyrrhotite, chalcopryite and galena occur in a highly sheared silicified mafic unit (3.5 m thick) at the contact between tonalite and conglomerate (Deposit A area).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposits are located near Matowokamank narrows at the east end of Stevenson Lake, north of the Malagamana River, approximately 200 km southeast of the Hudson Bay railway line. Deposit B is located about 1.6 km (1 mi) northeast of Deposit A.

History of staking is as follows:

Year	Claim Name	Claim Number	Staker
A:			
1949	Copper Lamb Nos. 4-6	W 17360-2	T. Lamb
1957	Barry Nos. 15, 16, 37	W 28388, 89, 28556	
B:			
1949	Copper Lamb 3,	W 17359	T. Lamb
	Lamb Nos. 6, 7, 14		
1957	Barry Nos. 2-5, 8, 9	W 28375-78, 81, 82	H.R. Lawson
1959	AB Nos. 6, 7, 10, 11	W 31314, 5, 8, 9	A. Morand
	- 1959 - assigned - Canadian Longyear Limited		

Work was recorded on the Copper Lamb claims in 1950-51.

A sample from the Deposit A area returned 0.02 (oz/ton?) gold, 3.8 (oz/ton?) silver, 345 ppm copper (Ermanovics et al., 1975). The area was mapped by the Manitoba Government in 1985. A pyrite, chalcopryite and malachite showing was noted on the former AB 6 claim (Preliminary Map 1985 I-1).

In 1987, the properties were staked under Serge 2, 4 (W 51769, 72) by Serge Langevin for Gilles Desautels. The claims were cancelled in 1989.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

gold, silver.

NAME OF PROPERTY
Stevenson Lake Copper

N.T.S. ARRA 53E/13 NE

FILE NO. 306
REF. CU 1

REFERENCES

- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-62.
- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area; in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-199.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-8.
- Weber, W. and Schledewitz, 1980, Molson Lake - Kalliecahoolie Project (63I/4, 6 to 8; 53L/1 to 8; 53K/3, 4); in Manitoba Mineral Resources Division, Report of Field Activities, 1980, p. 33-37.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- *Map 4084G, Stevenson Lake East, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.

NAME OF PROPERTY
Stevenson Lake Copper

N.T.S. AREA 53E/13 NE

FILE NO. 306
REF. CU 1

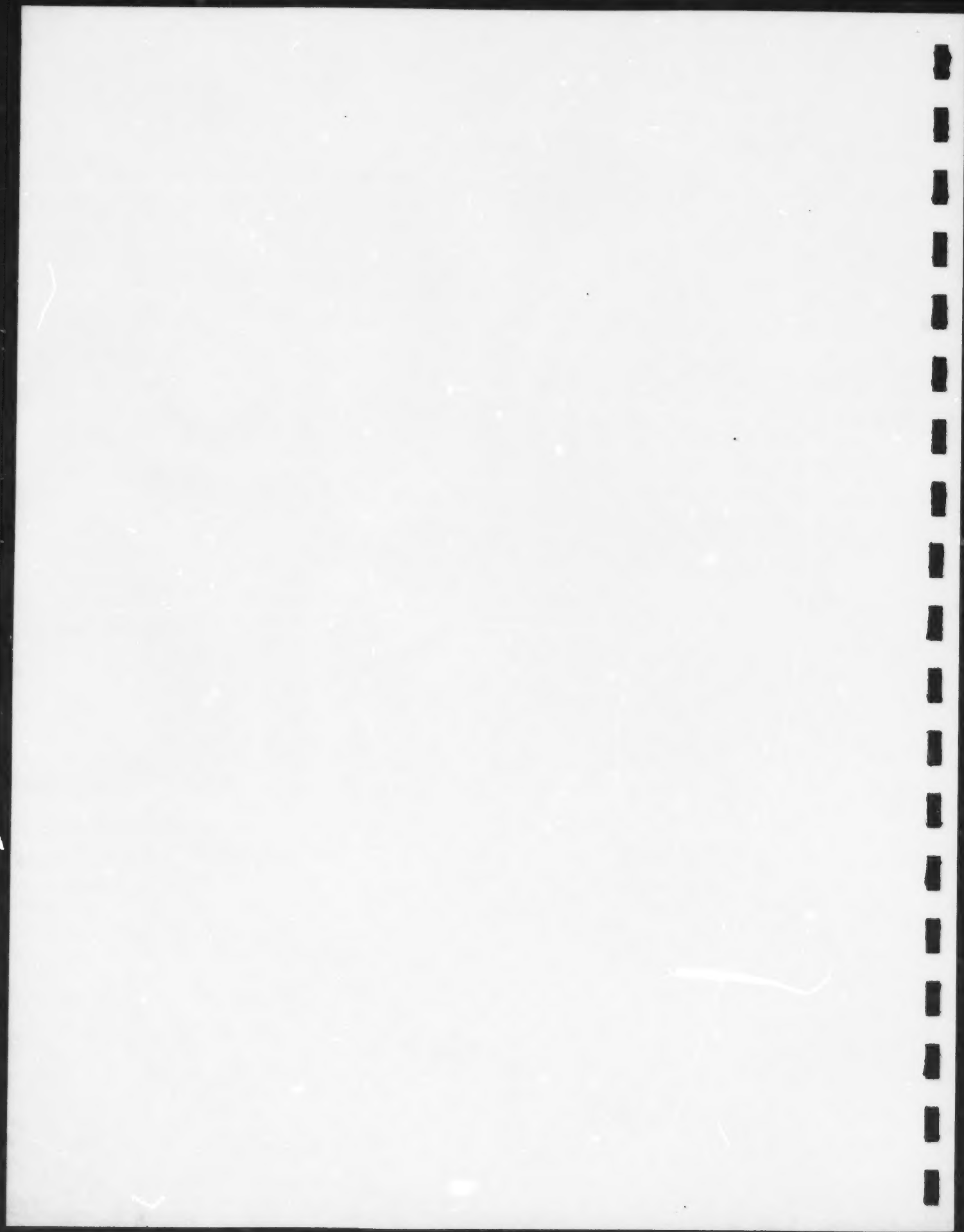
MAP REFERENCES cont'd

Map ER79-2-1, Superior Province, northern segment, (Index Map showing location of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Preliminary Map 1985 I-1, Wakum Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series NE 15, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

REMARKS

A sample of mineralized greywacke intruded by gabbro, collected 3.3 km ENE of this area, returned 1600 ppm Cu; a 17 cm (7 inch) thick lens of pyrite and chalcopyrite was noted in the area (Ermanovics et al., 1975).

Comp./Rev.		GC	PA
By Date	02-61	02-74	06-90



PRODUCT GOLD

M.T.S. ARRA 53E/12 NE

REF. AU 3

NAME OF PROPERTY

Jack of Spades Group

OWNER OR OPERATOR AND ADDRESS

1990- Open

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 43.76'

Long. 95° 39.49'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 13 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Island Lake Group andesite flows, tuff and agglomerate, minor basalt, siltstone and conglomerate (Geological Survey of Canada, Map 1646A). The occurrence is located on an island in the central part of Bigstone Lake and consists of a quartz/carbonate vein that is 1.8 m (6 ft) wide and contains pyrite and arsenopyrite.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on an island in the northeast end of Bigstone Lake, which is approximately 225 km from the Hudson Bay Railway.

The following stakings have occurred:

Year	Claim Name	Claim Number	Staker
?	Jack of Spades No. 4	?	?
(1940	Cowen Bigstone Lake No. 5	W 10167	H.S. Cowen
(1940	Spitfire No. 5	W 10207	D. Cartwright
	-1941 - assigned W.T. Guyn		
1947	Bigstone No. 3	W 15624	A.D. Bellingham
	Work may have been done on Jack of Spades No. 4.		
1970-71	An airborne EM/Mag survey was flown over parts of this area by Geoterrex Limited for Amax Exploration, Inc. (Non-confidential Assessment File No. 91800).		
1976	Permit 19 issued to Manitoba Mineral Resources Ltd.		
1978	Permit 19 cancelled		
1981	Stone 1 CB 13281 staked by W. Bruce Dunlop Limited (N.P.L.)		
1983	Stone 1 CB 13281 lapsed. Stone 40 (W 48414) staked by Noranda Exploration Company, Limited. Some geological mapping was done.		
1984-85	Two islands in the former Jack of Spades No. 4 area were sampled by Neale (1984). One mineralized sample of a mafic flow returned 1.03 g/t (0.03 oz/ton) Au, 0.29% Cu, 0.10% Zn (Neale, 1985).		
1985	Bigstone 1 (W 49525) staked by W. Bruce Dunlop Limited (N.P.L.)		
1986	Bigstone 1 transferred to Noranda Exploration Company, Limited which carried out geophysical surveys and a 2-hole 218 m drill program		
1987	Bigstone 1 and Stone 40 transferred to W. Bruce Dunlop Limited (N.P.L.)		
1989	Bigstone 1 and Stone 40 cancelled		

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, zinc

0308J

- 1 -

NAME OF PROPERTY
Jack of Spades Group

N.T.S. AREA 53E/12 NE

FILE NO. 302
REF. AU 3

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-395.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91800, 70682 (non-confidential parts).
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 12.
- Neale, K.L., 1984, Bigstone Lake Project (53E/parts of 12NW and NE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 39.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16, 48.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).

NAME OF PROPERTY
Jack of Spades Group

N.T.S. AREA 53E/12 NE

FILE NO. 302
REF. AU 3

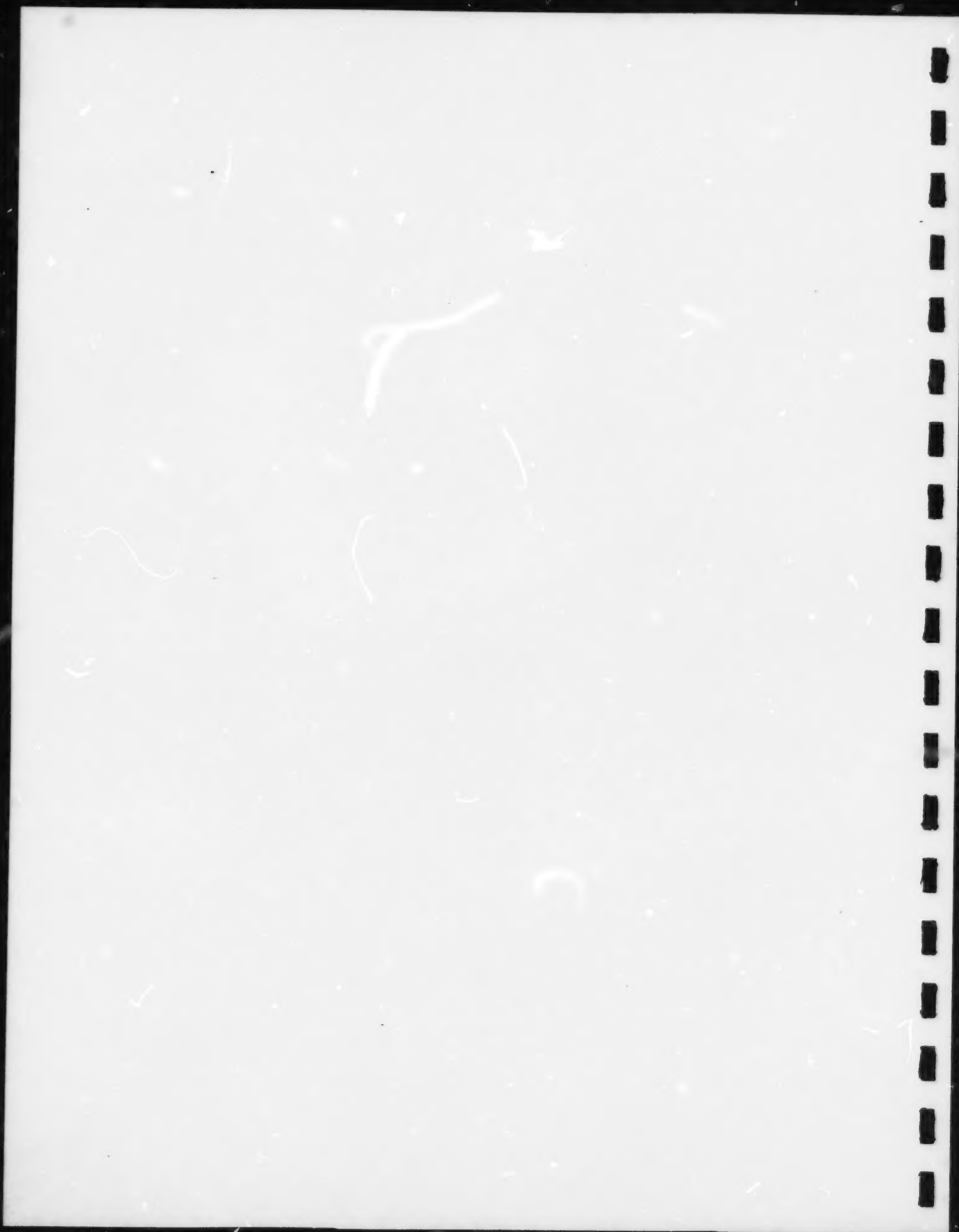
MAP REFERENCES cont'd

#Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series NE 12, 53E, Scale 1:31 680, circa 1937, Mining Recording, Manitoba Mines Branch.

REMARKS

McIntosh (1941, p. 11) states: "All exploration work has been done on gold-bearing quartz veins." It is therefore assumed he is describing a gold deposit (Ibid., p. 12). This description is titled "Jack of Spades Claim", but the location of the prospect symbol C on map 38-1 was never covered by any claims in the Jack of Spades Group.

Comp./Rev.	CC	JR	PA
By Date	2-74	09-87	06-90



PRODUCT Copper

N.T.S. AREA 53E/12 NE

REF. CU 1

NAME OF PROPERTY

Reahil Bay Chalcopyrite

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED -cp showing

Mining Division Winnipeg

Lat. 53° 39.77'

Long. 95° 31.25'

UNCERTAINTY: 1000 m

Sec.

Tp. 54

R. 14 EPM

DESCRIPTION OF DEPOSIT

A deposit of chalcopyrite, shown on Map 26-1960, on the east shore of Reahil Bay is situated in Precambrian granites.

A deposit of pyrite and chalcopyrite, located 0.8 km northeast of Knight Lake, is in sediments of the Precambrian Hayes River Group.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960, H.A. Quinn noted an occurrence of chalcopyrite on the east shore of Reahil Bay and an occurrence of pyrite and chalcopyrite 0.8 km east of Knight Lake (Map 26-1960). The deposits are about 225 km southeast of the Hudson Bay railway line.

An island northwest of the Reahil occurrence was sampled by Ermanovics et al. (1975): the sample returned 0.03 (ppm?) Au, 2 (ppm?) Ag, 100 ppm Zn, 64 ppm Cu.

REFERENCES

- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-62.
- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 11-12.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.

NAME OF PROPERTY
Reahil Bay Chalcopyrite

N.T.S. AREA 53E/12 NE

FILE NO. 303
REF. CU 1

REFERENCES cont'd

- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

REMARKS

A gold occurrence is indicated east of Reahil Bay on a map by Davies et al. (1962).

Comp./Rev.		CC	PA
By Date	02-61.	02-74	06-90

PRODUCT	Pyrite	N.T.S. AREA 53E/12 NW	REF. PYR 1
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NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS
Long Bay (Bigstone Lake West)	1990 - Open

OBJECT LOCATED	py occurrence	Mining Division	Winnipeg
Lat.	53° 42.00'	Long.	95° 45.00'
		UNCERTAINTY:	500 m
Sec.		Tp.	53
		R.	12 EPM

DESCRIPTION OF DEPOSIT

Pyrite is shown on Map 26-1960 as occurring in six locations around Bigstone Lake in NW 12, 53E. These are shown in metasediments, metavolcanics, and metamorphic rocks of the Precambrian Hayes River Group.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960 H.A. Quinn noted six occurrences of pyrite around the shores of Bigstone Lake (Map 26-1960). These deposits are about 225 km southeast of the Hudson Bay railway line.

In 1970-71, an airborne EM/Mag survey was flown by Geotrex Limited for Amax Exploration, Inc. (Non-confidential Assessment File No. 91800).

In 1976-1978, Manitoba Mineral Resources Ltd. took out Permit 19. Exploration work consisted of rock sampling, geophysical surveys and some diamond drilling: up to 0.3% Cu, 0.2% Zn was reported in drill core assays (Non-confidential Assessment File Nos. 92191, 92273, 92302).

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-395.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91800, 92191, 92273, 92302.
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, zinc
1913 '0'

NAME OF PROPERTY

Long Bay (Bigstone Lake West) N.T.S. AREA 53E/12 NW

FILE NO. 304

REF. PYR 1

REFERENCES cont'd

- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16, 48.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- #Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

REMARKS

Samples of scattered drillcore from an island in this area returned assays of up to 0.06 (ppm?) Au, 2.4 (ppm?) Ag, 1420 ppm Zn, 8860 ppm Cu (Ermanovics et al., 1975).

Comp./Rev.

By Date

12-61

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02-74

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06-90

1913 '0'

- 2 -

PRODUCT	Pyrite	N.T.S. AREA 53E/12 NE	REF. PYR 2
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NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS
Reahil Bay Pyrite	1990 - Open

OBJECT LOCATED	py occurrence	Mining Division Winnipeg	
Lat.	53° 41.40'	Long.	95° 34.00'
		UNCERTAINTY:	500 m
Sec.		Tp.	55
		R.	14 EPM

DESCRIPTION OF DEPOSIT

There are nine occurrences of pyrite which occur north and west of Reahil Bay, usually on the shores or on islands of Bigstone Lake (Map 26-1960). The occurrences are generally located in Precambrian volcanic rocks (greenstones) and sediments of the Hayes River Group.

HISTORY OF EXPLORATION AND DEVELOPMENT

In 1960 H.A. Quinn noted on Map 26-1960, nine occurrences of pyrite north and west of Reahil Bay, on the shores and islands of Bigstone Lake (see attached map). These deposits are about 225 km southeast of the Hudson Bay railway line.

In 1970-71, an airborne EM/Mag survey was flown over parts of this area by Geotrex Limited for Amax Exploration, Inc. (Non-confidential Assessment File No. 91800).

In 1976-1978, Manitoba Mineral Resources Ltd. took out Permit 19. Exploration work consisted of rock sampling, geophysical surveys and some diamond drilling (Non-confidential Assessment File Nos. 92273, 92302).

Some of the occurrences were sampled by Ermanovic et al. (1975), Neale (1985) and by Noranda Exploration Company, Limited in 1984:

Pyrite #1 (see attached map):

a sample (#1) taken by Ermanovics et al. (1975) returned trace Au, Pb, 0.24% Zn, 0.07% Ni, 0.09% Cu; another sample (#441) returned up to 0.28% Zn, 0.11% Cu (Neale, 1985).

Pyrite #2:

a sample returned 8 ppm Mo (Non-confidential parts of Assessment File No. 70682).

Pyrite #3:

a sample (#4) returned trace Au, Pb, Ni, Cu, 0.01% Zn (Ermanovics et al., 1975); another sample (#773) returned up to 8.1% Zn (Neale, 1985).

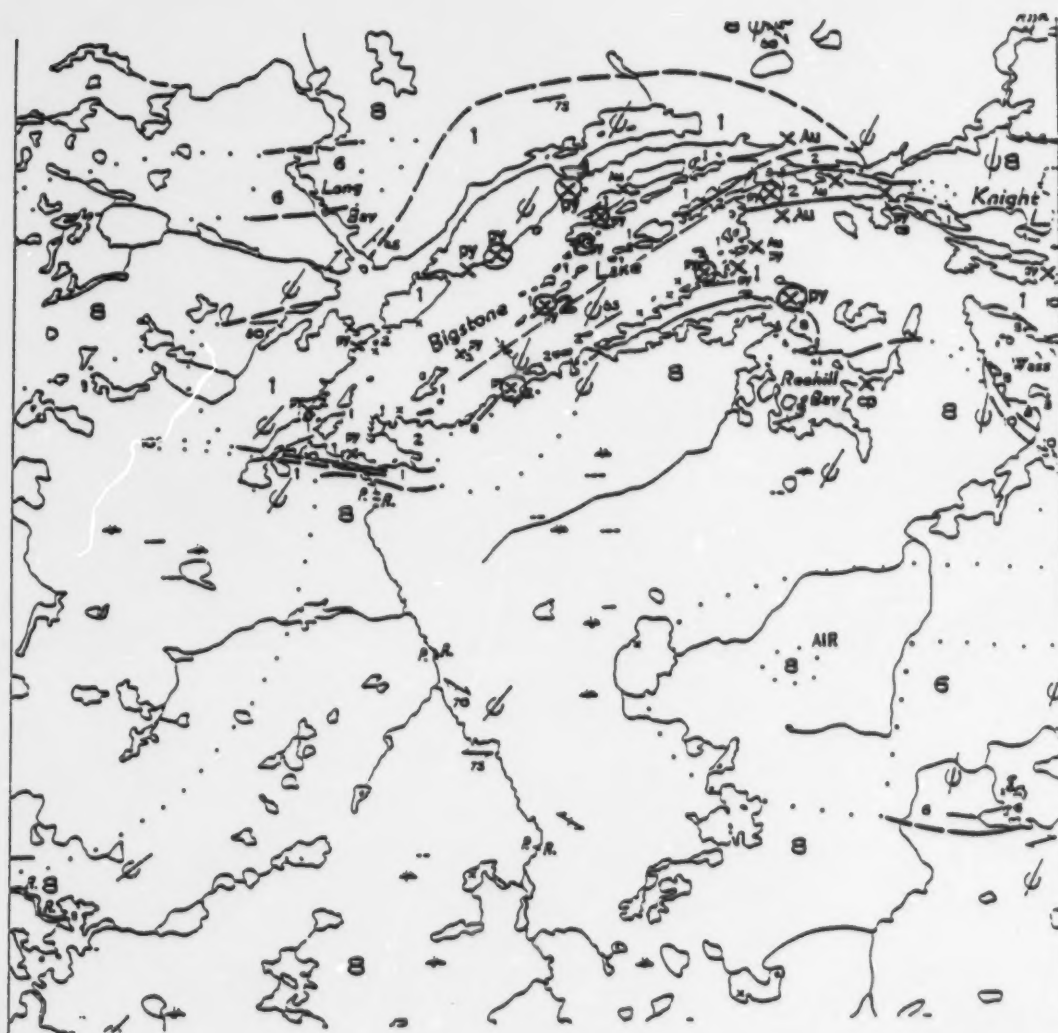
Associated minerals or products of value
Copper, zinc

NAME OF PROPERTY
Reahil Bay Pyrite

N.T.S. AREA 53E/12 NE

FILE NO. 305
REF. PYR 2

Figure 1: Location of pyrite occurrences, from Map 26-1960.



NAME OF PROPERTY
Reahil Bay Pyrite

N.T.S. AREA 53E/12 NE

FILE NO. 305
REF. PYR 2

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-315.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91800, 92273, 92302, 70682 (Non-confidential parts).
- McIntosh, R.T., 1941, Bigstone Lake area; Manitoba Mines Branch, Publication 38-1, p. 1-12.
- Neale, K.L., 1984, Bigstone Lake Project (53E/parts of 12NW and NE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 126-128.
- Neale, K.L., 1985, Geological investigations in the Knight Lake-Bigstone Lake area (53E/11 NW); in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 200-202.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 15-16.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-39.

MAP REFERENCES

- #Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4083G, Bigstone Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 38-1, Bigstone Lake area, (Geology), Scale 1:63 360-Accompanying Report by McIntosh (1941), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map D, Bigstone Lake area, (Geology), Scale 1:100 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map of Bigstone and Knight lakes, Manitoba by I.F. Ermanovics, GSC Open File 282, Geological Survey of Canada (1975).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).

NAME OF PROPERTY
Reahil Bay Pyrite

N.T.S. AREA 53E/12 NE

FILE NO. 305
REF. PYR 2

MAP REFERENCES cont'd

Preliminary Map 1986 B-1, Bigstone Lake, (Geology), Scale 1:20 000, by K.L. Neale, J.G. Bardsley, R.M.J. Lemoine, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

Comp./Rev.	CC	PA
By Date	02-74	06-90

PRODUCT	Asbestos	N.T.S. AREA 53E/14 NE	REF. ASB 1
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NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS
Sun No. 1 (Collins Bay)	1990 - Open

OBJECT LOCATED	asb showing	Mining Division	Winnipeg
Lat.	53° 57.75'	Long.	95° 04.8'
		UNCERTAINTY:	1000 m
Sec.		TP.	57
		R.	17 EPM

DESCRIPTION OF DEPOSIT

The occurrence of asbestos is in Precambrian granite and granodiorite country rocks (Map 26-1960).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located at the west end of Collins Bay, off Island Lake, approximately 240 km southeast of the Hudson Bay railway line.

It was staked in 1962 as the Sun No. 1 (W 35722) by G. Wass. The next year, 17 m³ (600 cu ft) of rock was removed by trenching. The claim was cancelled in 1965.

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/general).
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.
- Weber, W. and Schledewitz, 1980, Molson Lake - Kalliecahoolie Project (63I/4, 6 to 8; 53L/1 to 8; 53K/3, 4); in Manitoba Mineral Resources Division, Report of Field Activities, 1980, p. 33-37.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
-

NAME OF PROPERTY
Sun No. 1 (Collins Bay)

N.T.S. AREA 53E/14 NE

FILE NO. 309
REF. ASB 1

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- *Map 4060G, Dobbs Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NE 14, 53E, Scale 1:31 680, circa 1962, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	PA
By Date	02-61	02-74	07-90

PRODUCT GOLD

N.T.S. AREA 53E/14 NW

REF. AU 1

NAME OF PROPERTY

Cliff No. 1

OWNER OR OPERATOR AND ADDRESS

1990-The Lithium Corporation of
Canada, Limited
500 - 67 Richmond St. W.
Toronto, Ontario
M5H 1Z5

OBJECT LOCATED Shaft

Mining Division Winnipeg

Lat. 53° 55.85'

Long. 95° 29'

UNCERTAINTY: 1000 m

Sec.

Tp. 57

R. 14 EPM

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Island Lake Group conglomerate, quartz wacke, siltstone, turbiditic greywacke and argillite that overlies Hayes River Group basalt, andesite, volcanic breccia and correlative amphibolitic schist and gneiss (Geological Survey of Canada, Map 1646A). The occurrences consist of two sulphide- and gold-bearing quartz veins that vary from 25 cm to 1.8 m (10 inches to 6 ft) wide and strike roughly east/west.

HISTORY OF EXPLORATION AND DEVELOPMENT

The shaft is located east of Stevenson Lake on the Stevenson River, approximately 200 km southeast of the Hudson Bay railway line.

The deposit was staked as Cliff No. 1 (W2390) by G. Shaw in 1933 and assigned the next year to Stevenson Lake Gold Mines Limited. That year 27 m³ (975 cu ft) of trenching and 17 m³ (617 cu ft) of pitting was done on the claim. A 15 m (50 ft) shaft, 4.8 m (16 ft) of crosscutting and 10 m (33 ft) of drifting was completed on the claim by 1939.

Gold assays taken during shaft sinking in 1935 ranged from \$1.40 over 0.9 m (3 ft), to about \$10 per ton across 1.8 m (6 ft). Two grab samples averaged \$16.20. The claim was assigned to F.H. Jowsey in 1939 and cancelled in 1947.

Later history is as follows:

Year	Claim Name	Claim Number	Staker
1959	Joe 3-6, 9	W 31211-14, 7	H. Martin
	-cancelled in 1960		
1970	G.B. 3705		J.A. Bolen
	-cancelled in 1972		
1982	Will 2	CB 13138	D. McKinnon
	-cancelled in 1984		
1985	Step 1	W 49179	Larry John Salo for Don McKinnon
	-transferred to The Lithium Corporation of Canada, Limited in 1988.		

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper

NAME OF PROPERTY
Cliff No. 1

N.T.S. AREA 53E/14 NW

FILE NO. 310
REF. AU 1

REFERENCES

- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-62.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Corporation Files; "Stevenson Lake Gold Mines Limited".
 - b) Annual Report on Mines and Minerals; 7th Annual (1934-35), p. 78.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4060G, Dobbs Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NW 14, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	JR	PA
By Date	2-61	2-74	09-87	07-90

PRODUCT GOLD

N.T.S. AREA 53E/14 NW

REF. AU 2

NAME OF PROPERTY
Willow LakeOWNER OR OPERATOR AND ADDRESS
1990-Open ground

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 56.65'

Long. 95° 22.50'

UNCERTAINTY: 1000 m

Sec.

Tp. 57

R. 15 EPM

DESCRIPTION OF DEPOSIT

The property is located southeast of Willow Lake and is underlain by Precambrian Island Lake Group conglomerate, quartz wacke, siltstone, turbiditic greywacke and argillite that overlies Hayes River Group basalt, andesite, volcanic breccia and correlative amphibolitic schist and gneiss.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located about 1.2 km south of the east end of Willow Lake, approximately 217 km southeast of the Hudson Bay railway line.

It was staked in 1970 as CB 1721 by J.A. Bolen. The claim block was cancelled in 1972.

In May 1982, D. McKinnon staked Will 1 CB 13137 over the property; it was cancelled in August 1984.

In 1985, Step 2 (W 49180) was staked by Larry John Salo for D. McKinnon. The claim was transferred to The Lithium Corporation of Canada, Limited in 1988. Geophysical and geochemical surveys and geological mapping was carried out that year. Step 2 (W 49180) was cancelled in August 1989.

REFERENCES

- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-62.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake - Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.

NAME OF PROPERTY
Willow Lake

N.T.S. AREA 53E/14 NW

FILE NO. 311
REF. AU 2

REFERENCES cont'd

- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
Map 4060G, Dobbs Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
Map, Island Lake - Red Sucker Lake (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
#Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series NW 14, 53E, Scale 1:31 680, circa 1972, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	JR	PA
By Date	2-61	2-74	09-87	07-90

PRODUCT Nickel

N.T.S. AREA 53E/14 NW

REF. NI 1

NAME OF PROPERTY
Dobbs LakeOWNER OR OPERATOR AND ADDRESS
1990 - Open

OBJECT LOCATED Ni showing

Mining Division Winnipeg

Lat. 53° 57'

Long. 95° 20'

UNCERTAINTY: 1000 m

Sec.

Tp. 57

R. 15 EPM

DESCRIPTION OF DEPOSIT

The deposit is located on or near the contact between Precambrian volcanic rocks of the Hayes River Group and granite-gneisses.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located about 3.2 km east of the east end of Willow Lake, approximately 217 km southeast of the Hudson Bay railway line.

It was staked as CB 1724 in 1970 by J.A. Bolen. No work was reported and the claim block was cancelled in 1972.

In 1984, Mark 1 (W 49182) was staked by Mark Mills. Airborne survey work was carried out in 1986. The claim was transferred to The Lithium Corporation of Canada, Limited in 1988. Geophysical and geochemical surveys and geological mapping was carried out that year.

Adeline 1 (W 51610) was staked by Byron Wiebe in 1987 and cancelled in 1989.

Mark 1 was cancelled in 1990.

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake - Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.

NAME OF PROPERTY
Dobbs Lake

N.T.S. AREA 53E/14 NW

FILE NO. 313
REF. NI 1

REFERENCES cont'd

Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4060G, Dobbs Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map, Island Lake - Red Sucker Lake (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

Comp./Rev.		CC	PA
By Date	02-61	02-74	07-90

PRODUCT GOLD

N.T.S. AREA 53E/14 NW

REF. AU 3

NAME OF PROPERTY

Gord Group

OWNER OR OPERATOR AND ADDRESS

1990-Leif Mamen

304 - 220 Fernwood Ave E.

Winnipeg Manitoba

R2M 1C5

OBJECT LOCATED Centre of Gord 9

Mining Division Winnipeg

Lat. 53° 54.75'

Long. 95° 25.65'

UNCERTAINTY: 500 m

Sec.

Tp. 57

R. 14 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia and correlative amphibolitic schist and gneiss (Map 1646A). The volcanic rocks consist of basic flows and pyroclastic rocks and are intruded by basic and quartz porphyry stocks. Visible gold occurs in a series of narrow widely-spaced quartz veins. Associated with the gold are pyrite, tetradymite, galena, and chalcopyrite (Non-confidential Assessment File No. 91149).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on Gord Nos. 5, 6, 8, 9, 10, approximately 3.5 km south of the west end of Willow Lake, about 217 km southeast of the Hudson Bay railway line.

It has been staked several times (as follows) although the only reported work was on the Gord claims:

<u>Year</u>	<u>Claim Name</u>	<u>Claim Number</u>	<u>Staker</u>
1933	Lakeside No. 3	W 2888	R.K. Hope per J.V. Ronaldson
1958	Sput Nos. 2-8, 15	W 29196-202, 209	A. Duncan
1961	Gord Nos. 5, 6, 8-10	W 34089, 90, 2-4	J.G. Lawson
	-1961 - assigned J.F. White (Steep Rock Iron Mines Limited)		
	-1962 - assigned J.G. Lawson		

In 1962, 28 pits and trenches were dug on the Gord claims totalling 48 m³ (1683 cu ft) as well as 69 m³ (2430 cu ft) of stripping. Geological mapping was done at scales of 1:4800 and 1:600, and a geologic report was prepared.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Lead, bismuth, copper

NAME OF PROPERTY
Gord No. 5, 6, 8-10

N.T.S. AREA 53E/14 NW

FILE NO. 312
REF. AU 3

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

A sample of a quartz vein with visible gold, from the Gord 10 claim, returned 373.7 g/t (10.9 oz/ton) Au; a second sample returned 29.8 g/t (0.87 oz/ton) Au. Assay values of samples from some of the pits are:

<u>Pit No.</u>	<u>assays/footage (oz Au/feet)</u>					
6	.08/4.0	.02/8.0	.02/4.0	tr/7.2	.08/3.8	
7	.20/5.3	tr/4.2	tr/4.2			
4	.14/6.0	tr/4.0	tr/5.0	tr/6.0		
2	.06/4.5	tr/3.5				
14	.01/5.0	.02/5.0	.04/5.0			
15	tr/2.0	.08/2.5	tr/2.0			
16	.04/5.0	.02/5.0	.02/2.0			
18	.02/0.2	1.0/0.3	tr/2.2	.43/0.3		
19	.51/4.0	.02/4.0				
23	.02/8.0	.08/3.0	tr/3.0	.16/5.0	tr/5.0	tr/3.0

Assays of \$0.70 and \$1.40 over 14 feet and 9.8 feet, respectively, were reported for quartz porphyry samples, in 1962 (Non-confidential Assessment File No. 91149). "The sampling results are too low to be of interest" (Ibid.).

More recent claim history is as follows:

<u>Year</u>	<u>Claim</u>	<u>Staker</u>
1970	CB 1729	J.A. Bolen
	CB 3713, 4	
1973	CB 5689	S. McLeod
	CB 5860	
	-assigned to Rock Ore Exploration and Development Limited	
	-cancelled	
1981	CB 12922, 23 (Leif IV, Leif III)	Russell Fontaine for Leif Mamen
	(former Gord 5, 6, 9, 10 claims)	
1984	Lar 3, 4 (W 49169, 70)	Larry Salo
	(parts of former Gord 6, 8, 9 claims)	
1986	Airborne geophysical surveys over Lar group.	
	Leif claims were transferred to Agassiz Resources Ltd.	
1988	Lar claims were transferred to The Lithium Corporation of Canada, Limited in January. Lar 3 (W 49169) was cancelled in April.	
1989	Leif claims were transferred back to Leif Mamen in February.	
	Lar 4 (W 49170) was cancelled in April.	

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Mining Recording; File No. 59156-73 (Gord Nos. 1-18)
 - b) Non-confidential Assessment Files; File No. 91149.

NAME OF PROPERTY

Gord No. 5, 6, 8-10

N.T.S. AREA 53E/14 NW**FILE NO.** 312**REF.** AU 3

REFERENCES cont'd

- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake - Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Park, R.G. and Ermanovics, I.F., 1978, Tectonic evolution of two greenstone belts from the Superior Province in Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1808-1816.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.

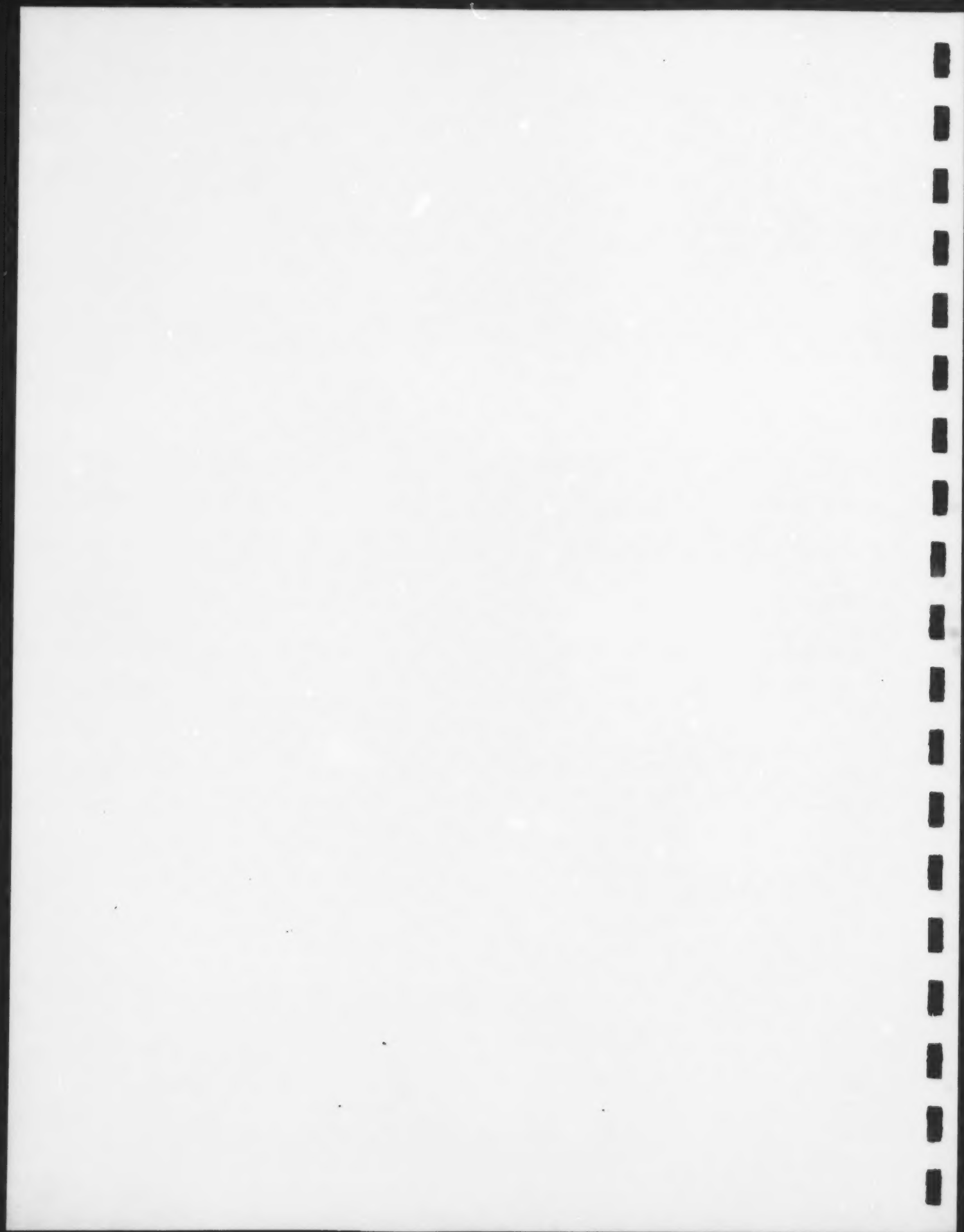
MAP REFERENCES

- *Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4060G, Dobbs Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map, Island Lake - Red Sucker Lake (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NW 14, 53E, Scale 1:31 680, circa 1966, Mining Recording, Manitoba Mines Branch.

REMARKS

At Begg Lake, 9.5 km SSE, chalcopyrite, gold and silver mineralization was reported in association with a granitic intrusion; an assay of 0.477% Cu over 9 m (29.5 ft) was reported (Manitoba Mines Branch, Corporation Files, Rock Ore Exploration and Development Limited; Non-confidential Assessment File No. 92110).

Comp./Rev.	CC	JR	PA
By Date	2-74	09-87	07-90



PRODUCT Silver

N.T.S. AREA 53E/15 NE

REF. AG 1

NAME OF PROPERTY:

Ile No. 88

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED: Ag showing

MINING DIVISION Winnipeg

Lat. 53° 54.2'

Long. 94° 44.4'

UNCERTAINTY: 100 m

Sec.

Tp. 57

R. 19 EPM

DESCRIPTION OF DEPOSIT

Silver is found in sheared gossans in silicified andesite of the Precambrian Hayes River Group. The discontinuous zone is approximately 153 m (500 ft) long. Maximum width is 2.4 m (8 ft), but the average is 0.6 to 0.9 m (2 to 3 ft). Highly oxidized pyrite comprises up to 10% of the rock in places. Gold was noted in one assay (Godard, 1963, p. 43).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the north shore of a small island, which is 4.8 km southeast of Linklater Island in Island Lake, approximately 240 km southeast of the Hudson Bay railway line.

In 1956, the deposit was staked as Ile No. 88 (W 26489) by L. Austin and assigned to Canadian Nickel Company Limited. The claim was cancelled in 1961.

The deposit was noted as Locality No. 8 on Map 59-3A by Godard (1963). He took a chip sample across the zone which assayed 19.2 g/t (0.56 oz/ton) silver, and trace gold (Ibid, p. 43).

In 1977, pyrite and chalcopyrite was noted by L. Solkoski and S. Mabbula (Manitoba Government).

In 1981, P. Dunlop staked CB 13321 (Link 8). The claim was cancelled in 1985.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Delaney, G.D., 1976, A reconnaissance study of the metamorphic petrology and volcanic geochemistry of a portion of the Island Lake greenstone belt, Manitoba; Brock University, M.Sc. Thesis, 100p.

Associated minerals or products of value
gold.

NAME OF PROPERTY

Ile No. 88

N.T.S. AREA 53E/15 NE**FILE NO.** 314**REF. AG** 1**REFERENCES** cont'd

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 43.
- Manitoba Mines Branch:
- a) Unpublished Information Files; 53E (general).
- Neale, K.L., 1984, Stratigraphy and basin evolution of the upper Hayes River and Cochrane Bay groups, Island Lake greenstone belt, Manitoba; Carlton University, M. Sc. Thesis, 177p.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/general).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 32.
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 49-50, 60.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Turek, A., Carson, T.M., Smith, P.E., Van Schmus, W.R. and Weber, W., 1986, U-Pb zircon ages for rocks from the Island Lake greenstone belt, Manitoba; Canadian Journal of Earth Sciences, v. 23, No. 1, p. 92-101.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.

NAME OF PROPERTY

Ile No. 88

N.T.S. AREA 53E/15 NE

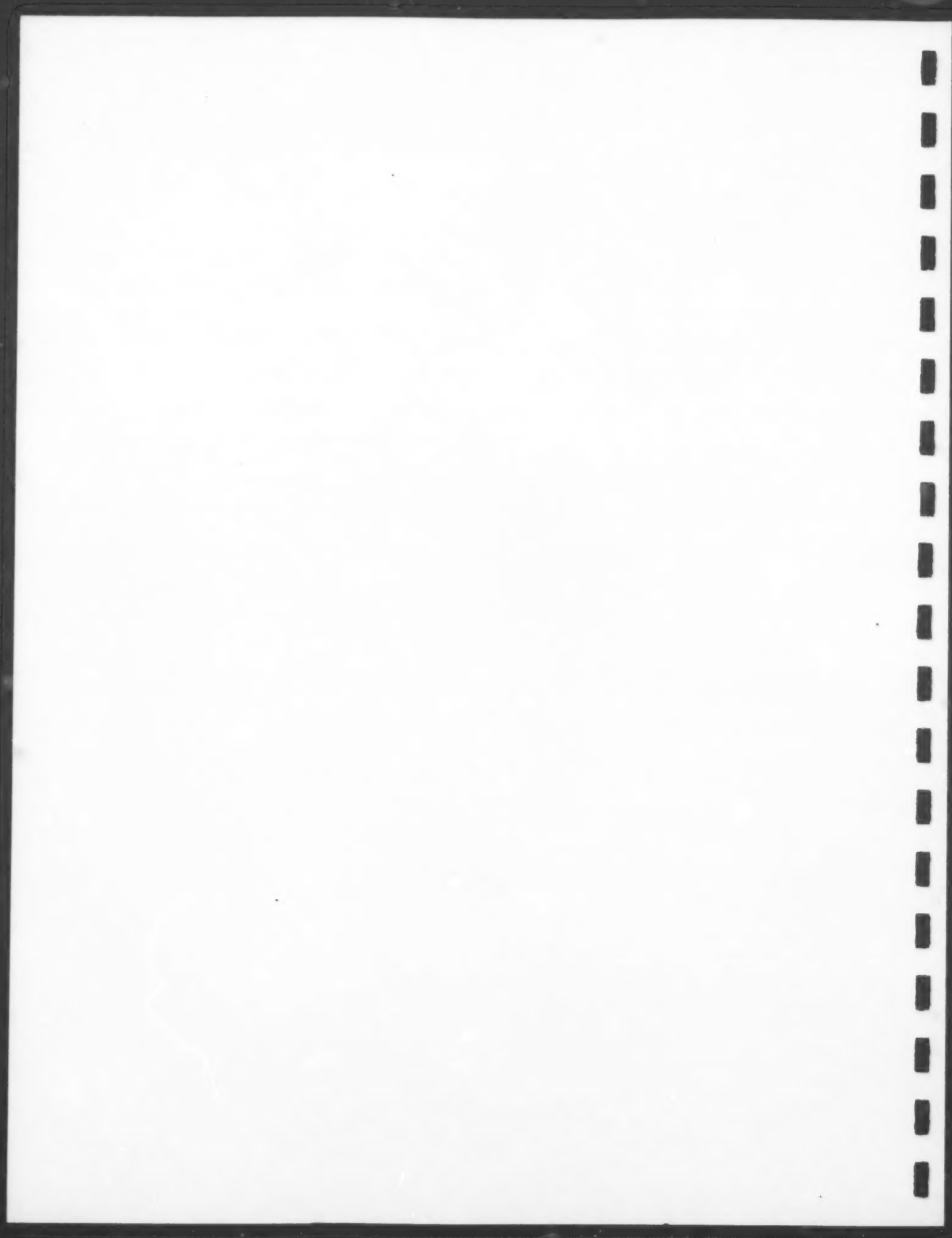
FILE NO. 314

REF. AG 1

MAP REFERENCES cont'd

- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- #Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1982 I-2, Garden Hill, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NE 15, 53E, Scale 1:31 680, circa 1961, Mining Recording, Manitoba Mines Branch.

Comp./Rev.	CC	BR	PA
By Date	12-63	03-74	07-88 05-90



PRODUCT Silver

N.T.S. AREA 53E/15 SE

REF. AG 2

NAME OF PROPERTY:

Rex and Climpy veins
(Rex No. 3)

OWNER OR OPERATOR AND ADDRESS

1990 -

Midway Lake Minerals Corp. (20% interest)
1624 - 555 St. Mary Avenue
Winnipeg, Manitoba
R3C 3X4Wydmar Development Corporation (20% int)
Wydmar Resource Enterprises Ltd. (30% int)
Bighorn Development Corporation (30% int)
400-255 17th Ave S.W.
Calgary, Alberta
T2S 2T8

OBJECT LOCATED: Centre of Rex No. 3

MINING DIVISION Winnipeg

Lat. 53° 45.5'

Long. 94° 38'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 20 EPM

DESCRIPTION OF DEPOSIT

Quartz veins are found in altered basic dykes which intrude Precambrian granitic rocks. The main vein strikes N45°E and dips 85°S. It extends for approximately 61 m (200 ft), but is separated into two sections by 1.5 m (5 ft) of wall-rock. The barren western section is 1.5 m wide. The eastern part is locally mineralized with silver, gold, pyrite, and chalcopyrite in its 1.2 m (4 ft) width.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is situated on the northeast part of an unnamed island about 4.8 km south of Confederation Island in Island Lake, about 240 km southeast of the Hudson Bay railway line.

The deposit was staked as Rex No. 3 (W 17763) by L. Wass in 1949 and assigned to F. Wass a year later. It was assigned to Rex Island Mining Syndicate in 1950. At least 10 trenches were dug and/or blasted from 1951 to 1955. Wass reported that pyrite contained gold values up to \$200 and chalcopyrite assayed from \$15 to \$30 copper (Rex Island Mining Syndicate, Corporation File). The claim was cancelled in 1957.

It was restaked by J. Wass as United No. 2 (W 30464) in 1958. Between 1964 and 1969, 244 m³ (8619 cu ft) of rock was removed. The claim was cancelled in 1971.

Associated minerals or products of value
gold, copper, molybdenum.

NAME OF PROPERTY

Rex and Climpy veins (Rex No. 3) N.T.S. AREA 53E/15 SE

FILE NO. 315**REF.** AG 2**HISTORY OF EXPLORATION AND DEVELOPMENT** cont'd

Manitoba Mines Branch Geologist J.D. Godard sampled the property in 1958 or 1959. A grab sample taken by him assayed 525.9 g/t (15.34 oz/ton) silver and 43.2 g/t (1.26 oz/ton) gold. "The results obtained were not indicative of the entire deposit as the vein itself is predominantly barren quartz with only a few narrow streaks of well-mineralized material" (Godard, 1963, p. 42).

The deposit was restaked as CB 5970 in October of 1973 by David P. Playfair and was cancelled in January of 1977 with no evidence of work having been done.

In September 1979, Tom A. Hamilton staked the deposit as CB 15 (Ham-Chor). In December 1979, one sample (77-3-QX) was reported to have returned 4.11 g/t (0.12 oz/ton) Au (Non-confidential Assessment File No. 92398). Two trenches were dug on the former Rex 3 claim in 1979-1980. A transfer of title was made in April of 1980 to Climpy Claims Inc. and the claim was renamed Climpy (CB 11635). Noranda Exploration Company, Limited did some shoreline mapping in May 1980 and sent samples (#4301-4311) of quartz veins to Warnock Hersey International Limited for assay. The best assays reported were: 50.1 g/t (1.46 oz/ton) Au, 44.6 g/t (1.3 oz/ton) Ag, 0.32% Cu, trace Mo for Sample No. 4307; 16.8 g/t (0.49 oz/ton) Au, 19.2 g/t (0.56 oz/ton) Ag, 0.60% Cu, trace Mo for Sample No. 4308. In June of 1980, the title was transferred to Noranda Exploration Company, Limited. The overall results were "disappointing" and "no further interest in the property was warranted by Noranda". In July of 1980, CB 11635 (Climpy) was transferred back to Climpy Claims Inc.

In the early part of 1980, exploration was also carried out in the southwest part of the island (former Rex 18 claim area). Five trenches were dug in 1979-80, and samples were sent for assay. One sample (V2485) returned up to 225.6 g/t (6.58 oz/ton) Au and 34.3 g/t (1 oz/ton) Ag; another sample (#7ABQ) returned 98.7 g/t (2.88 oz/ton) Au. Sampling results indicated four showings with some of the best assays as follows:

<u>Sample No.</u>	<u>Showing</u>	<u>Au</u> g/t (oz/ton)	<u>Ag</u> g/t (oz/ton)	<u>Cu</u> %	<u>Mo</u> %
#4328	1B	10.97 (0.32)	6.17 (0.18)	0.01	
#4341	1C	17.1 (0.50)	7.54 (0.22)	trace	trace
#4340	1C	12.3 (0.36)	6.17 (0.18)		
#4331	1D	207.1 (6.04)	19.2 (0.56)	trace	trace
#4332	1D	216 (6.30)	48.7 (1.42)	0.02	0.01

NAME OF PROPERTY

Rex and Climpy veins (Rex No. 3) N.T.S. AREA 53E/15 SE

FILE NO. 315

REF. AG 2

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Samples taken from a small island southeast of these trenches, assayed 82.3 g/t (2.4 oz/ton) Au (#7AA) and 60.34 g/t (1.76 oz/ton) Au (#7BG). In May 1980, T.D. McDonald, project geologist for Noranda, did a property examination and recommended drilling two drill holes on the main quartz vein, on the southwest part of the island. The holes were to be drilled in the winter of 1981. A 227 kg (500 lb) bulk sample was apparently collected by Noranda in September 1980.

In February of 1981, CB 11635 (Climpy) was transferred back to Noranda Exploration Company, Limited. Four channel samples were collected from the southwest part of the island (old Rex 18 claim). Results were as follows:

Showing	Sample weight kg (lbs)	Au g/t (oz/ton)	Ag g/t (oz/ton)	Remarks
1A	22 (48)	1.03 (0.03)	1.37 (0.04)	Up to 10% disseminated py and 2-5% Mo in pit
1B	74 (164)	1.03 (0.03)	trace	Quartz vein (in granodiorite) with up to 5% py, trace cpy and malachite staining
1C	66 (145)	3.43 (0.1)	1.37 (0.04)	Quartz vein with disseminated py, trace cpy, malachite staining.
1D	61 (134)	21.59 (0.63)	10.63 (0.31)	Quartz vein (in shear zone between granodiorite and diabase) with up to 10% py, trace cpy.

The claim was transferred back to Climpy Claims Inc. in June 1981. One year of work was submitted for the year ending October 22, 1981. The claim lapsed on December 20, 1982. In 1983, relief from forfeiture was granted under Section 52 of "The Mines Act". Three years of work was submitted for the time period ending October 22, 1986.

On June 3, 1985, all interest in the claim was transferred to Midway Lake Minerals Corp.. Wydmar Resource Enterprises Limited and Bighorn Development Corporation were each granted a 20% interest in the property in 1986, and another 10% interest in 1987. Four years of work was submitted for the time period ending October 22, 1990. In 1988, Midway transferred 20% interest to Wydmar Development Corporation. In 1990, a writ of seizure and sale was registered against the 30% interest held by Wydmar Resource Enterprises Limited.

NAME OF PROPERTY

Rex and Climpy veins (Rex No. 3) N.T.S. AREA 53E/15 SE

FILE NO. 315

REF. AG 2

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-316.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 41-42.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 92398.
 - b) Corporation Files; Rex Island Mining Syndicate.
 - c) Mining Recording Files; File No. 39344 (Rex No. 3); File No. 52488 (United No. 2).
- Petak, H.W., 1976, Island Lake (53E/15 SE, 16 SE & SW and 53F/12 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 70-72.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1981, Mineral deposit studies-Superior province: a) Island Lake, and b) Bird River sill; in Manitoba Mineral Resources Division, Report of Field Activities 1981, Report GS-16, p. 74-77.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

NAME OF PROPERTY

Rex and Climpy veins (Rex No. 3) N.T.S. AREA 53E/15 SE

FILE NO. 315**REF.** AG 2

MAP REFERENCES cont'd

#Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1952, Mining Recording,
Manitoba Mines Branch.

REMARKS

On Rex No. 11, 27 m³ (950 cu ft) of rock was removed by blasting in 1948.
Pyrite-bearing granodiorite assayed 3.43 g/t (0.10 oz/ton) silver, and 2.06
g/t (0.06 oz/ton) gold in samples collected by Godard (1963, p. 42).

Comp./Rev.		CC	BR	PA
By Date	12-63	01-74	07-88	05-90



PRODUCT	Asbestos	N.T.S. ARRA	53E/15 NE, NW	REF. ASB 1
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NAME OF PROPERTY:	OWNER OR OPERATOR AND ADDRESS
Asbestos Group	1990 - Open

OBJECT LOCATED:	1. Centre of Asbestos No. 8	MINING DIVISION	Winnipeg
	2. Centre of Asbestos No. 30		

Lat.	53° 53.6'	Long.	94° 46.25'	UNCERTAINTY: 500 m
	53° 52.43'	Long.	94° 43.8'	

Sec.	TP. 56, 57	R. 19 EPM
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DESCRIPTION OF DEPOSIT

Asbestos is found in sheared and serpentized ultramafic rocks associated with altered volcanics of the Precambrian Hayes River Group. Slip-fibre asbestos veinlets range up to 0.6 cm (0.25 inches) thick, 0.9 cm (0.375 inches) long, and form approximately 5% of the rock.

Cross-fibre asbestos is present but uncommon. Talc is present along shear planes.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposits are located on an island about 2.4 km south of Wass Island (Asbestos Nos. 27, 30) and on Asbestos No. 8 whose centre is 0.4 km south of the south end of Linklater Island. These deposits are about 240 km southeast of the Hudson Bay railway line.

They were staked in 1954 by T. Wass as Asbestos Nos. 8, 27, 30 (W 20921, 20933, 6). The claims were assigned to Rex Island Mining Syndicate and optioned to Canadian Nickel Company Limited in 1956. Four holes totalling 1091 m (3579 ft) were drilled that year (DDH Nos. 62-64, Map ER79-2-5). A Mag/EM survey was also done.

The claims were assigned to The International Nickel Company of Canada, Limited in 1958 and cancelled in 1961. A sulphide occurrence was noted in the vicinity of the former Asbestos No. 30 claim (Map 59-3A).

Some sampling was done by Delaney (1976), but results are not known. Sampling was also done by Theyer (1982). One sample from the Asbestos No. 8 area returned up to 5250 ppm Cr and 2180 ppm Ni (Theyer, 1985).

Link 16 (CB 13329) was staked over the former Asbestos No. 8 area by W. Bruce Dunlop Limited (N.P.L.) in 1982. It was cancelled in 1985.

Associated minerals or products of value
talc.

NAME OF PROPERTY
Asbestos Group

N.T.S. AREA 53E/15 NE, NW

FILE NO. 317
REF. ASB 1

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), p. 12-13, 33-34.
- Delaney, G.D., 1976, A reconnaissance study of the metamorphic petrology and volcanic geochemistry of a portion of the Island Lake greenstone belt, Manitoba; Brock University, M.Sc. Thesis, 100p.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 43.
- Manitoba Mines Branch:
- a) Unpublished Information Files; 53E (general).
 - b) Non-confidential Assessment Files; File No. 91152.
- Neale, K.L., 1984, Stratigraphy and basin evolution of the upper Hayes River and Cochrane Bay groups, Island Lake greenstone belt, Manitoba; Carlton University, M. Sc. Thesis, 177p.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/general).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
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- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 48-49, 61.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.

NAME OF PROPERTY
Asbestos Group

N.T.S. AREA 53E/15 NE, NW

FILE NO. 317
REF. ASB 1

MAP REFERENCES cont'd

- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1982 I-1, Waasagomach, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NE and NW 15, 53E, Scale 1:31 680, circa 1961, Mining Recording, Manitoba Mines Branch.

REMARKS

A small outcrop of soapstone was reported 1.75 km northwest, at Fleet Point (Ames, 1975; Occurrence No. 8, Theyer, 1980, p. 48; see also Theyer, 1985, p. 4). Some asbestos was reported in the first 23 m of a drill hole, 4.3 km north of the soapstone occurrence (DDH 1-76, Non-confidential Assessment File No. 91502).

Comp./Rev.		CC	PA
By Date	12-63	03-74	06-90



PRODUCT GOLD

N.T.S. AREA 53E/15 SE

REF. AU 1

NAME OF PROPERTY

High Rock Island - Pluto No. 1
(Ministik Mine)

OWNER OR OPERATOR AND ADDRESS

1990 -
Midway Lake Minerals Corp. (20% interest)
1624 - 555 St. Mary Avenue
Winnipeg, Manitoba
R3C 3X4Wydmar Development Corporation (20% int)
Wydmar Resource Enterprises Ltd. (30% int)
Bighorn Development Corporation (30% int)
400-255 17th Ave S.W.
Calgary, Alberta
T2S 2T8

OBJECT LOCATED shaft

Mining Division Winnipeg

Lat. 53° 45.8'

Long. 94° 30.7'

UNCERTAINTY: 100 m

Sec.

Tp. 55

R. 20 EPM

DESCRIPTION OF DEPOSIT

The deposit consists of gold-bearing quartz veins that strike at right angles across the contact between granite and volcanic rocks of the Precambrian Hayes River Group. The "Main" vein strikes 355°, dips 85°E, ranges in width from 0.4 to 0.7 m, and extends for approximately 137 m. Mineralization consists of free gold, pyrite, chalcopyrite, galena and tellurides. Drilling indicated that most of the gold occurs as coarse specks or "nuggets" (Bighorn Development Corporation, Annual Report 1987); on surface, coarse gold (up to 0.32 cm wide) was discovered in pockets (up to 15.2 cm long) along the vein and in stringers striking into the wall (Northern Miner, July 7 and August 25, 1986). Wall rock is mineralized for 1.8 m on either side of the vein. The vein is covered by overburden to the north and the lake to the south.

The Climpy vein has a drill-indicated strike length of 415 m (1360 ft) and an average width of 1.2 m (4 ft). It contains sparse to massive pyrite with minor chalcopyrite. Drilling indicated a 0.6-6 m (2-20 ft) wide structure consisting of quartz and diabase, within a zone of weak to intense quartz stockwork (that contains pyrite and occasionally molybdenite) in granite (Wydmar Development Corporation, Annual Report 1987).

Drilling on the 9-18 m (30-60 ft) wide Juniper vein indicated a complex zone of diabase dykes, silicified granodiorite rocks and a stockwork of quartz/calcite veins and stringers. Mineralization consists of galena, chalcopyrite, native gold and minor pyrite (Wydmar Development Corporation, Annual Report 1987).

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, lead, tellurium, silver, molybdenum.

NAME OF PROPERTY

High Rock Island - Pluto No. 1 N.T.S. ARRA 53E/15 SE
(Ministik Mine)

FILE NO. 318**REF. AU 1**

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located near the southeast shore of Henderson Island (previously known as High Rock Island), which is southeast of Confederation Island in Island Lake, about 266 km southeast of the Hudson Bay railway line.

The deposit was originally staked as the Mac Nos. 2, 3 (W 754, 3) by Knute Pay in 1932. In 1934 it was restaked as Pluto No. 1 (W 4401) by J. Wass and assigned to A. MacDonald. Ministik Lake Gold Mines Limited, a subsidiary of San Antonio Gold Mines Limited, had an interest in the property. In 1934, eleven pits were dug and the vein was blasted. Assays taken along the vein averaged 44.23 g/t (1.29 oz/ton) Au across approximately 0.6 m (2 ft). Three silver assays averaged 116.91 g/t (3.41 oz/ton). In 1935, a sample sent to the Mines Branch, Ottawa, assayed 12.69 g/t (0.37 oz/ton) Au, 15.77 g/t (0.46 oz/ton) Ag, 0.03% Cu, 0.02% As, 0.36% Pb, 0.05% Zn, and 2.24% Fe₂O₃ (Investigations in Ore Dressing and Metallurgy). A 2-compartment shaft was sunk in 1937 to a depth of 72 m with levels established at 38 m and 69 m. 34 m (110 ft) of cross-cutting was done on the second level. Work halted in autumn 1937 due to lack of financing (McMurchy, 1944, p. 6). The claims were then allowed to lapse.

The deposit was restaked as Nonsuch No. 1 (W 17927) by D.A. Foster in 1950. Ministik Lake Gold Mines Limited carried out a 3-hole 393 m diamond drill program that year (Non-confidential Assessment File No. 91150). Assays ranged from 0.34 g/t (0.01 oz/ton) to 1.71 g/t (0.05 oz/ton) gold.

A Manitoba Mines Branch field party took grab samples of the vein in 1951 that yielded assays of 74.06 g/t (2.16 oz/ton) Au and 18.86 g/t (0.55 oz/ton) Ag (Oliver, 1952; Godard, 1963, p. 41). The following assays were also reported:

3.77 g/t (0.11 oz/ton) Au, 27.09 g/t (0.79 oz/ton) Ag (Chip samples over 51 cm).
4.11 g/t (0.12 oz/ton) Au, 5.14 g/t (0.15 oz/ton) Ag (Channel sample over 66 cm).
30.9 g/t (0.90 oz/ton) Au.
1.03 g/t (0.03 oz/ton) Au.

In 1967 the deposit was restaked as Min No. 18 (W 40899) by G.F. Wass and in 1970 as Rod Nos. 1, 2 (W 43058, 57) by R. McKenzie. Up to 1974, a total of 13 m³ (468 cu ft) of rock had been removed from the Rod claims. A few grab samples were collected by Delaney (1976) but assay results were not reported.

R. McKenzie staked CB 5174 in 1978, and did some prospecting and trenching (Non-confidential Assessment File No. 92336). The area was mapped by Gilbert and Weber (1983). In 1985, CB 5174 was transferred to Midway Lake Minerals Corp. which had started an extensive program of stripping, backhoe trenching and sampling of the main vein in 1984-85 (Wydmar Development Corporation, Annual Report 1987).

NAME OF PROPERTY

High Rock Island - Pluto No. 1 N.T.S. AREA 53E/15 SE
(Ministik Mine)

FILE NO. 318**REF. AU 1**

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1986 Wydmar Resource Enterprises Ltd. and Bighorn Development Corporation each acquired a 20% interest in the property and carried out a 75-hole drill program. Significant intersections are listed below:

<u>Hole</u>	<u>Hole Depth</u> <u>(metres)</u>	<u>Width</u> <u>(metres)</u>	<u>Assay g/t</u> <u>(oz/ton) gold</u>
24	47.3-50.5	3.2	3.43 (0.10)
35	76.6-76.9	0.30	3.77 (0.11)
47	17.7-18.3	0.61	9.26 (0.27)

Source: Northern Miner, April 2, 1986, p. 10.

During the summer of 1986, Bighorn Development carried out extensive sampling of the main vein over a strike length of 174 m. An average grade of 13.37 g/t (0.39 oz/ton) Au across 1.8 m (6.1 ft) was established (Bighorn Development Corporation, Annual Report 1987). Four bulk samples from the main vein returned the following assays:

<u>Sample</u>	<u>Weight kg (lbs)</u>	<u>Grade g/t (oz/ton) Au</u>
1	368 (811)	10.59 (0.309)
2	376 (830)	14.43 (0.421)
3	355 (783)	42.86 (1.25)
4	449 (990)	19.20 (0.560)

Prospecting apparently located five new vein systems on the property, two of which were traced over 610 m (2000 ft) of strike length. Two of the veins have abundant sulphide mineralization (Northern Miner, July 7, 1986).

The Company estimated the deposit to contain a geological inventory of 326 000 tonnes grading 15.43 g/t (0.61 oz/ton) gold (Northern Miner, November 3, 1986). Based on these results the company recollared the shaft, rehabilitated the underground workings and carried out further drilling. A chip sampling program in the shaft and old workings on the main vein was completed: the best assay was 32.06 g/t (0.935 oz/ton) Au across 0.5 m (1.7 ft) at a depth of 14 m (45 ft). The companies planned to carry out further diamond drilling and to test a 953 kg (2100 lb) bulk sample from the 67 m level in 1987. Underground bulk sampling was to be financed through flow-through share agreements with First Exploration Fund 1988 and NIM Resource-1988 and Company. However, three 363 kg (800 lb) underground bulk samples were apparently lost during transportation to a custom mill. A builder's lien registered by D.W. Coates Enterprises Ltd. in 1986, was cancelled in 1987.

In 1987, Wydmar Resource Enterprises Ltd. and Bighorn Development Corporation each acquired a further 10% interest in the property. In January-February of that year, 23 holes were drilled on the Climpy vein indicating a strike length of 415 m (1360 ft) and an average width of 1.2 m (4 ft); maximum drill depth was 109 m (358 ft) and the best assays ranged from 4.8 to 17.1 g/t (0.14 to 0.50 oz/ton) Au (Bighorn, Annual Report 1987). According to Wydmar Development Corporation (Annual Report 1987), 34 holes were drilled on the Climpy vein and the best assay results ranged from 4.8 to 48.5 g/t (0.14 to 1.414 oz/ton) Au.

NAME OF PROPERTY

High Rock Island - Pluto No. 1 N.T.S. AREA 53E/15 SE
(Ministik Mine)

FILE NO. 318**REF. AU 1**

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

The Juniper vein was trenched in 1985 and 1987 and native gold was found over a strike length of at least 9 m (30 ft); drill core samples from eight drill holes returned assays of trace to 121.51 g/t (3.544 oz/ton) Au and trace to 19.89 g/t (0.58 oz/ton) Ag (Wydmar Development Corporation, Annual Report 1987). About 10 510 m (34 482 ft) of diamond drilling in 139 holes had been done in 1985-1987, cutting the Main Vein, Juniper, Climpy, Rod, Rex and Jack veins (Wydmar Development Corporation, Annual Report 1987). Most of this drilling, 9144 m (30 000 ft), was done on two zones to a maximum depth of 610 m (2000 ft) (The Nickel Belt News, August 31, 1987).

A 23 tonne (25 ton) per day pilot mill was installed in 1987 and a 163 tonne (180 ton) surface bulk sample was milled under the direction of Millar Western Engineering Ltd. The sample averaged 12.38 g/t (0.361 oz/ton) across a width of 3.7 m (12 ft) (Bighorn, News release, October 12, 1988). About 3.6 tonnes (4 tons) of concentrate produced from this sample apparently assayed 617.1 and 1028.6 g/t (18 and 30 oz/ton) Au (Bighorn, News release, March 22, 1988). A builder's lien registered by Dormar Construction Inc. was discharged in 1987.

In 1988 Wydmar Development Corporation (formerly Petgo Resources Ltd., and Silver Acorn Developments Ltd.) acquired a 20% interest in the property. The Company has a share exchange agreement with Wydmar Resource Enterprises Ltd..

To date, \$5 million has been spent on diamond drilling, trenching, channel sampling and custom milling (Northern Miner, March 21, 1988). About 9 to 14 tonnes (10 to 15 tons) are currently being processed per day (Bighorn, News release, March 22, 1988). The Companies are negotiating a \$6 million private placement to put the property into production at 180 tonnes per day (200 tons per day) (Wydmar Development Corporation, News release, June 20, 1988).

Drill-indicated reserves were reported by various sources as follows:

316 000 tonnes (348 232 tons) of 15.43 g/t (0.45 oz/ton) Au (World Investment News, February 1987).

166 439 oz Au (based on 518 m (1700 ft) strike length, 253 m (830 ft) down-dip extent, average width of 1.8 m (6.1 ft) and a grade of 13.37 g/t (0.39 oz/ton) Au, assuming 30% wastage and 15% dilution) (Bighorn Development Corporation, Annual Report 1987).

150 000 oz Au in 453 721 tonnes (500 000 tons) of ore (average width 1.3 m (4.3 ft)) (Wydmar Development Corporation, Annual Report 1987).

150 000 oz Au in 453 721 tonnes (500 000 tons) of ore with an additional drill-inferred 1 361 162 tonnes (1 500 000 tons) grading 10.28 g/t Au (Northern Miner, March 21, 1988).

535 500 oz Au in 1 079 855 tonnes (1 190 000 tons) of ore (based on 518 m strike length, 213 m dip extension, and surface bulk sample results; Company reports actual mining width is more than 4.9 m (16 ft)) (Bighorn, News release, March 22, 1988).

NAME OF PROPERTY

High Rock Island - Pluto No. 1 W.T.S. AREA 53E/15 SE
(Ministik Mine)

FILE NO. 318**REF. AU 1**

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Drill-indicated reserves (revised since March 1988) have been reported by various sources as follows:

- 116 000 oz Au in 408 348 tonnes (450 000 tons) of ore (Bighorn, News release, October 12, 1988).
- 426 000 tonnes (470 000 tons) averaging 10.28 g/t (0.30 oz/ton) Au (J.Wyder, October 1988, in Manitoba Energy and Mines, Exploration Services Section, "Manitoba Exploration Highlights (March 1988-February 1989)", circa March 1989).
- 450 000 tonnes (408 349 tons) of 10.28 g/t (0.30 oz/ton) Au (Manitoba Energy and Mines, Annual Report 1988-89, p. 34).

According to Manitoba Energy and Mines (Annual Report 1988-89, p. 34): "The companies.....recently removed a 18 tonne sample from the Ministik Shaft on the Main Vein. In January 1989, the companies were awaiting new financing to commence more bulk testing." In March 1990, a writ of seizure and sale was registered against the 30% interest held by Wydmar Resource Enterprises Ltd.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 53-54.
- Delaney, G.D., 1976, A reconnaissance study of the metamorphic petrology and volcanic geochemistry of a portion of the Island Lake greenstone belt, Manitoba; Brock University, M.Sc. Thesis, 100p.
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- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 40-41.
- Manitoba Energy and Mines, Annual Report 1988-89, p. 34.
- Manitoba Mines Branch:
 - a) Corporation Files; Ministik Lake Gold Mines Limited; Bighorn Development Corporation; Wydmar Development Corporation.
 - b) Mining Engineering Files; Ministik Lake Gold Mines Limited; SE 15, 53E.
 - c) Non-confidential Assessment Files; File Nos. 91150, 92336.
 - d) Mining Recording Files; Pluto No. 1, File No. 18333; Nonsuch No. 1, File No. 39474; Rod Nos. 1 and 2, File Nos. 68664 and 65
 - e) Unpublished Information Files; 53E/16.
- McMurchy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-7.
- Mines Branch, Ottawa, 1935, Investigations in Ore Dressing and Metallurgy, No. 763, p. 227.

NAME OF PROPERTY

High Rock Island - Pluto No. 1
(Ministik Mine)

N.T.S. AREA 53E/15 SE

FILE NO. 318

REF. AU 1

REFERENCES cont'd

- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/16).
- Phillips, K.A., 1978, Minerals of Manitoba, Volume II: Metallic Minerals; Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, MRD Educational Series 78/2, p. 58.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-35.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 38-39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 13.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, p. 7
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MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- #Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1949, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY

High Rock Island - Pluto No. 1 N.T.S. AREA 53E/15 SE
(Ministik Mine)

FILE NO. 318**REF. AU 1**

REMARKS

Bighorn is also evaluating "Copper-nickel showings with associated platinum values along a band of ultra-mafic rocks" (Northern Miner, July 7, 1986).

Comp./Rev.**By Date**

2-61

CC

2-74

JR

09-87

PA

05-90

PRODUCT GOLD

N.T.S. AREA 53E/15 SE

REF. AU 2

NAME OF PROPERTY

ILE Group (Stevenson Island)

OWNER OR OPERATOR AND ADDRESS

1990-not open for staking

OBJECT LOCATED post #3 of Ile No. 253

Mining Division Winnipeg

Lat. 53° 52.15'

Long. 94° 40.6'

UNCERTAINTY: 500 m

Sec.

Tp. 56

R. 19 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian Hayes River Group basalt, andesite, volcanic breccia, correlative amphibolite schist and gneiss that is intruded by 'Early Plutonic Suite' hornblende-dominant granodiorite plutons and dykes. A gold-bearing quartz vein is located in a shear zone at the contact between andesite and a 1.2 m (4 ft) wide granitic dyke. The quartz and sheared wall rocks contain appreciable pyrite and trace amounts of gold. Further to the west, a molybdenite-bearing quartz vein occurs at the contact between granitic and volcanic rocks.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the southwest shore of Stevenson Island (previously known as Forestry Island), 3.2 km north of Jubilee Island in Island Lake, about 241 km southeast of the Hudson Bay railway line. An air strip is located on this island.

It was staked in 1936 as Nap Nos. 1, 2 (W 7529, 30) by C. Hanson and as Nap Nos. 4, 5 (W 7532, 33) by Rudolph W. Hiebert. Some trenching was completed on these claims. The Nap 4 claim was cancelled in 1938; the Nap 1, 2 and 5 claims were cancelled in 1939.

W. Nicoll restaked the deposit as Ile Nos. 252, 3, 5, 6 (W 26627, 28, 30, 31) in 1956 for Canadian Nickel Company Limited. A magnetic survey was carried out to locate any ultramafic or sulphide rich bodies which were not exposed on surface. Immediately west of the above Ile claims "A broad medium intensity anomaly" was found. Two other anomalies were located to the east of these claims (Non-confidential Assessment File No. 91151).

A sample of mineralized quartz, from the Ile 253 claim area, assayed 2.74 g/t (0.08 oz/ton) gold and no silver (Godard, 1963, p. 44).

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

lead, (soapstone, see Remarks).

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

The deposit was staked again in 1972 by C.E. Wass as Saga Nos. 5, 6 (W 44264, 5) and assigned to P.D. Holden the next year. Central Geophysics Limited did an electromagnetic (EM-16) and magnetic survey in 1974, but poor results were obtained (Non-confidential Assessment File No. 92341). According to their report, Carl Wass had apparently reported that gold, associated with pyrite and galena, had been found on Mary 1 (W 44108), located south of Saga 6. Other parts of this island were sampled by Delaney (1976), but results were not reported.

Following is the more recent claim history:

Sept. 1979 Stevenson 3 (CB 8493) staked by Walter Miller
May 1980 transferred to Wambel Gold Ltd.
Dec. 1981 claim cancelled. Rock sampling was completed in the region by Theyer (1982).
Oct. 1983 Air 1 (W 48888) staked by W. Bruce Dunlop Limited (N.P.L.)
Jan. 1986 claim cancelled

The ground is currently "not open for staking".

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Delaney, G.D., 1976, A reconnaissance study of the metamorphic petrology and volcanic geochemistry of a portion of the Island Lake greenstone belt, Manitoba; Brock University, M.Sc. Thesis, 100p.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1820.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 44.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91151, 92341.
 - b) Mining Recording Files; Nap No. 1, File No. 22421; Nap No. 2, File No. 22422; Nap No. 5, File No. 22425; Saga Nos. 5 and 6, File No. 70548 and 49.
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake-Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106.

REFERENCES cont'd

- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1981, Mineral deposit studies-Superior province: a) Island Lake, and b) Bird River sill; in Manitoba Mineral Resources Division, Report of Field Activities 1981, Report GS-16, p. 75.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Mineral Resources Division, Report of Field Activities 1982, Report GS-9, p. 55.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Map, Island Lake-Red Sucker Lake area (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- #Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1962, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY
ILE Group

N.T.S. AREA 53E/15 SE

FILE NO. 319
REF. AU 2

REMARKS

The island has a differentiated sill (probably, 3.2 km long and 457 m wide) consisting of soapstone, pyroxenite and gabbro; the soapstone has been used as a source of carving rock (Ames, 1975).

Comp./Rev.		CC	JR	PA
By Date	12-63	3-74	9-87	05-90

PRODUCT GOLD

N.T.S. AREA 53E/15 SE

REF. AU 3

NAME OF PROPERTY

Sigma

OWNER OR OPERATOR AND ADDRESS

1990- Ralph Birch
Island Lake
Manitoba
ROB OTO

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 50.0'

Long. 94° 40.3'

UNCERTAINTY: 100 m

Sec.

Tp. 56

R. 19 EPM

DESCRIPTION OF DEPOSIT

A gold and silver bearing quartz vein is exposed for 4.6 m (15 ft) along the contact between Precambrian granite, and diabase of the Hayes River Group. The vein is 10 cm (4 inches) thick and strikes N20°E, parallel to the diabase dyke. Veinlets of pyrite occur in the quartz.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on a small island at the east end of Jubilee Island, in Island Lake, about 241 km southeast of the Hudson Bay railway line.

The deposit was noted as "Locality No. 10" on Map 59-3A by Godard (1963). He took a sample of pyritized vein material which assayed 15.77 g/t (0.46 oz/ton) gold and 13.37 g/t (0.39 oz/ton) silver.

It was staked as Sigma Nos. 2, 3 (W 43267, 8) by T.A. Hamilton in 1970. A trench of 27 m³ (960 cu ft) was dug on Sigma No. 3. A combined electromagnetic (HLEM) and magnetic survey was carried out on the north part of Sigma 2, 3 by Barringer Research Limited on behalf of Canadian Occidental Petroleum Ltd. in 1974 (Non-confidential Assessment File No. 92319). Shoreline mapping and rock chip sampling was also carried out that year by Canadian Occidental Petroleum Ltd. (Non-confidential Assessment File No. 92318, 19). Canadian Occidental Petroleum Ltd. was the recorded owner of the claims until 1977, when the claims were transferred to T.A. Hamilton. Three year's work was reported for the year ending 1979. The claims were cancelled in 1980.

The following restakings were recorded:

<u>Year</u>	<u>Claim Name</u>	<u>Holder</u>
1982-85	Link 22, 23 (W 46640, 41)	W. Bruce Dunlop Limited (N.P.L.)
1986-88	Horn 4 (W 51222)	Ralph Birch
1988-present	Axe 4 (W 52291)	Ralph Birch

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

silver.

NAME OF PROPERTY

Sigma

N.T.S. AREA 53E/15 SE

FILE NO. 320

REF. Au 3

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1820.
- Gilbert, H.P. and Weber, W., 1983, Island Lake project (parts of 53E/15, and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1983, p. 63-69.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 43.
- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map-area (53E), Manitoba and Ontario; Geological Survey of Canada, Report of Activities, Part A, Paper 76-1A, p. 395.
- Manitoba Mines Branch:
- a) Mining Recording Files; File Nos. 69022, 23 (Sigma 2, 3);
 - b) Non-confidential Assessment Files; File Nos. 92318, 92319.
- McMurchy, R.G., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-9, 17.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 32.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, p. 5.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY
Sigma

N.T.S. AREA 53E/15 SE

FILE NO. 320
REF. Au 3

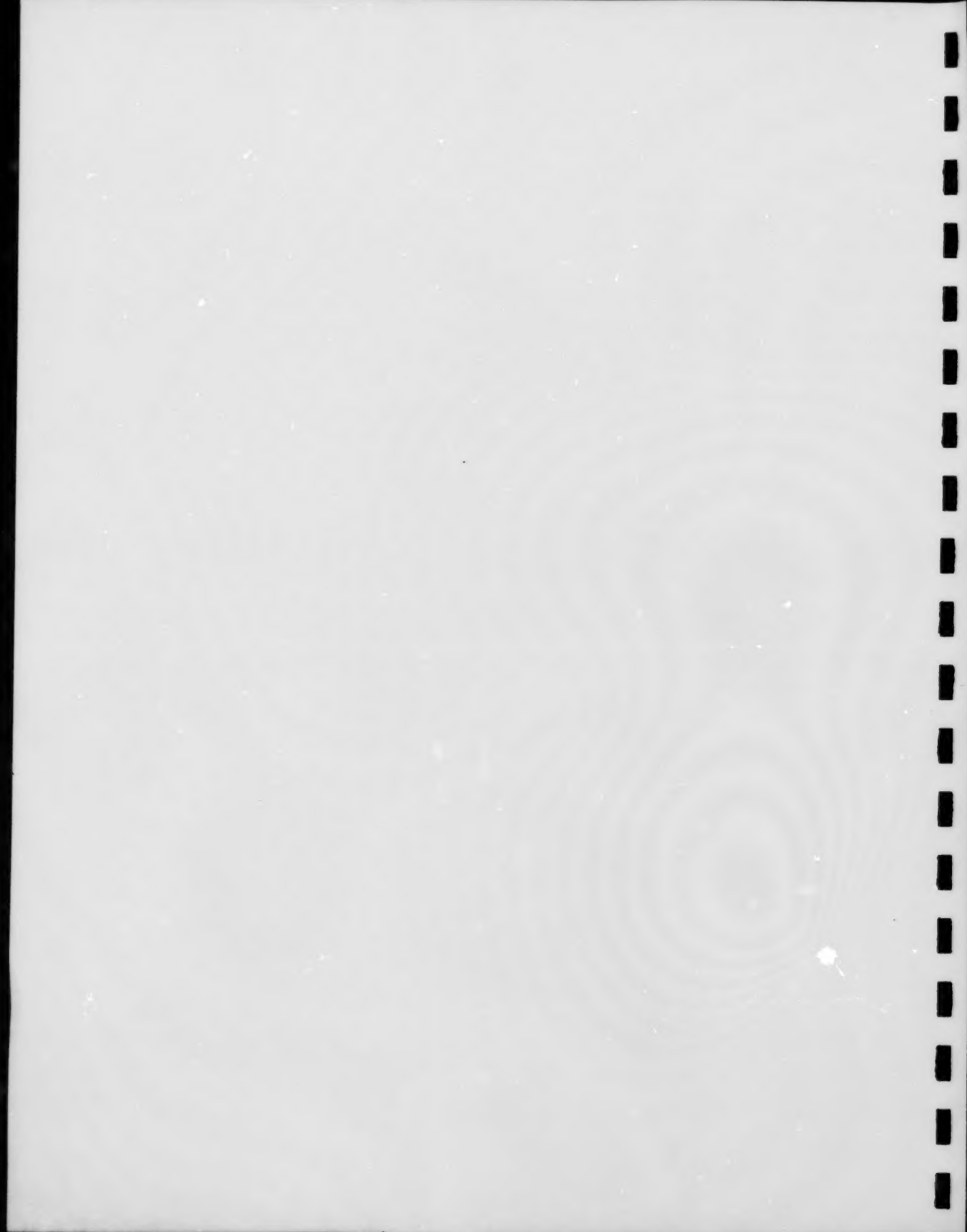
MAP REFERENCES cont'd

#Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1974, Mining Recording, Manitoba Mines Branch.

REMARKS

Copper and zinc mineralization was found north of Sigma 2, 3 (53E/15 ZN 1) on CB 6532; py-po-cpy and malachite was reported on Sigma 1 (Non-confidential Assessment File Nos. 92318, 19).

Comp./Rev.		CC	JR	PA
By Date	12-63	2-74	09-87	05-90



PRODUCT Copper

N.T.S. AREA 53E/15 SE

REF. CU 1

NAME OF PROPERTY

Alpha Group (Jubilee Island)

OWNER OR OPERATOR AND ADDRESS

1990-Open

OBJECT LOCATED Showing No. 3

Mining Division Winnipeg

Lat. 53° 50.9'

Long. 94° 44.83'

UNCERTAINTY: 250 m

Sec.

Tp. 56

R. 19 EPM

DESCRIPTION OF DEPOSIT

"Disseminated chalcopyrite-pyrrhotite-pyrite are found in (Precambrian) andesitic lavas, andesitic and dacitic tuffs, feldspar-quartz (dacitic) porphyry intrusions and near to the margins of a small granodioritic intrusion....All these rocks have been deformed and lie in a steeply dipping overturned anticline....Segregation quartz veins occur lying parallel to the foliation, and these carry disseminated, blebby and massive chalcopyrite, bornite, pyrrhotite and pyrite." (Non-confidential Assessment File No. 92210).

Moderate to high copper and silver values were reported mainly in "narrow, sheared tuffaceous horizons associated with extensive quartz veining" (Non-confidential Assessment File No. 92989). Copper was also reported to occur near the northern and southern boundaries of a granodiorite intrusion (near the centre of the property).

HISTORY OF EXPLORATION AND DEVELOPMENT

At least nine copper-silver showings were located in the north-central part of Jubilee Island, 6.7 km west-southwest of Stevenson Island, and 5 km south of Wass Island in Island Lake, approximately 288 km southeast of Thompson.

In 1955 Thomas Hamilton was granted Alpha Nos. 1 and 2 (W 24639, 40). Work was done on these claims from 1957 to 1959. In 1957 an airborne EM survey was done by Canadian Nickel Company Limited under Airborne Permit No. 19 (Non-confidential Assessment File No. 91624). Alpha Nos. 3-6, 9-10 (W 32767-70, 73, 74) were staked by T. Hamilton in 1960. Work was done on the Alpha Group of claims from 1960 to 1969.

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684). Mineralized showings discovered by T.A. Hamilton were mapped and sampled by R.D. Moss of Barringer Research Limited and R. Gaal of Omar Explorations Inc. in September 1970. This was followed up with an airborne survey in October 1970, but results were negative.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Silver, zinc, lead, gold, gallium, nickel.

NAME OF PROPERTY

Alpha Group (Jubilee Island) N.T.S. AREA 53E/15 SE

FILE NO. 1030**REF.** CU 1**HISTORY OF EXPLORATION AND DEVELOPMENT cont'd**

Detailed geological mapping was done by R.H. Wallis in July-August 1971, followed by trenching and blasting by J. Trepanier and N. Fortier in September 1971 for Barringer Research Limited. R.H. Wallis mapped and sampled the trenches in October 1971 (Non-confidential Assessment File No. 92210). Some of the following results were reported:

<u>Showing</u>	<u>Sample Assays</u>
1	0.38% Cu, 10.28 g/t (0.3 oz/ton) Ag
2 Pit No. 1	3.67% Cu, 56.91 g/t (1.66 oz/ton) Ag, 1.37 g/t (0.04 oz/ton) Au
Pit No. 2	4.12% Cu, 54.17 g/t (1.58 oz/ton) Ag, 0.68 g/t (0.02 oz/ton) Au
grab samples	4.69% Cu, 48.68 g/t (1.42 oz/ton) Ag, 0.68 g/t (0.02 oz/ton) Au
sample	1.44% Cu, trace Ag, 0.68 g/t (0.02 oz/ton) Au
3 Pit No. 1	1.80% Cu, 333.9 g/t (9.74 oz/ton) Ag, 2.05 g/t (0.06 oz/ton) Au
Pit No. 2	4.57% Cu, 349.4 g/t (10.19 oz/ton) Ag, 0.34 g/t (0.01 oz/ton) Au
3.6 m (12 ft) chip sample:	0.1% Ni
Pit sample	1.56% Cu, 1.71% Zn, 322.28 g/t (9.4 oz/ton) Ag, 1.37 g/t (0.04 oz/ton) Au, 0.08% Pb.
5 Pit 1	1.42% Cu, 2.05 g/t (0.06 oz/ton) Ag, 0.68 g/t (0.02 oz/ton) Au
Pit 2	0.42% Cu, 5.14 g/t (0.15 oz/ton) Ag, 0.34 g/t (0.01 oz/ton) Au
7 Pit 2	0.71% Cu, 1.37 g/t (0.04 oz/ton) Au, trace Ag
Pit 4	0.61% Cu, 0.68 g/t (0.02 oz/ton) Ag, 1.37 g/t (0.04 oz/ton) Au
8 Pit 1	1.72% Cu, 11.65 g/t (0.34 oz/ton) Ag, 0.68 g/t (0.02 oz/ton) Au
	1.30% Cu, 15.08 g/t (0.44 oz/ton) Ag, 0.68 g/t (0.02 oz/ton) Au
9	Trace Cu, 3.43 g/t (0.10 oz/ton) Ag, trace Au

An IP survey was apparently done by Barringer Research Limited in 1972.

Work continued to be reported on the Alpha Group until 1976. The Manitoba Government did a field investigation in 1977. Alpha 1 and 2 were cancelled in February 1978; the remaining Alpha claims were cancelled in June of that year.

In 1979, L.W. Chornoby (assisted by T.A. Hamilton) staked CB 11652, CB 11653 (Jub #1, #2). Prospecting, mapping, blasting and trenching was done in 1980 and copper, silver, lead, zinc and gallium were reported in assays (Non-confidential Assessment File No. 92440). V. Colcleugh examined the property for Noranda Exploration Company, Limited that summer.

In 1981, the holder's name changed to Noranda Exploration Company, Limited. The property had apparently been optioned from Climpy Claims Incorporated in April 1981. In August 1981, Noranda carried out geological mapping at a scale of 1:10 000, and detailed mapping and sampling of Barringer's trenches (Non-confidential Assessment File No. 92989). Moderate to high copper and silver values were found in most of the trenches: some of the best results were 599.9 g/t (17.50 oz/ton) Ag, 11% Cu, 0.9% Zn for a sample from Showing No. 3 and 114.5 g/t (3.34 oz/ton) Ag, 8.5% Cu, 0.11% Zn, 0.34 g/t (0.01 oz/ton) Au over 0.2 m for a chip sample from Showing No. 2. An assay of 1.4% Cu, 18.5 g/t (0.54 oz/ton) Ag, 0.02% Zn was reported for a sample taken from the central part of the property, near the south boundary of a granodiorite intrusion. The claim blocks were cancelled in 1983.

NAME OF PROPERTY

Alpha Group (Jubilee Island) N.T.S. AREA 53E/15 SE

FILE NO. 1030**REF. CU 1**

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
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- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W. Fyson), 1976, Geology of Island Lake map-area (53E), Manitoba and Ontario; Geological Survey of Canada, Report of Activities, Part A, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91624, 91684, 92210, 92440, 92989.
 - b) Unpublished Information Files; 53/16.
 - c) Mining Recording Files; File Nos. 46226, 27 (Alpha 1, 2); Nos. 57274-77, 80, 81 (Alpha 3-6, 9, 10)
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-9, 17.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/16).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
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- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).

NAME OF PROPERTY

Alpha Group (Jubilee Island) N.T.S. AREA 53E/15 SE

FILE NO. 1030

REF. CU 1

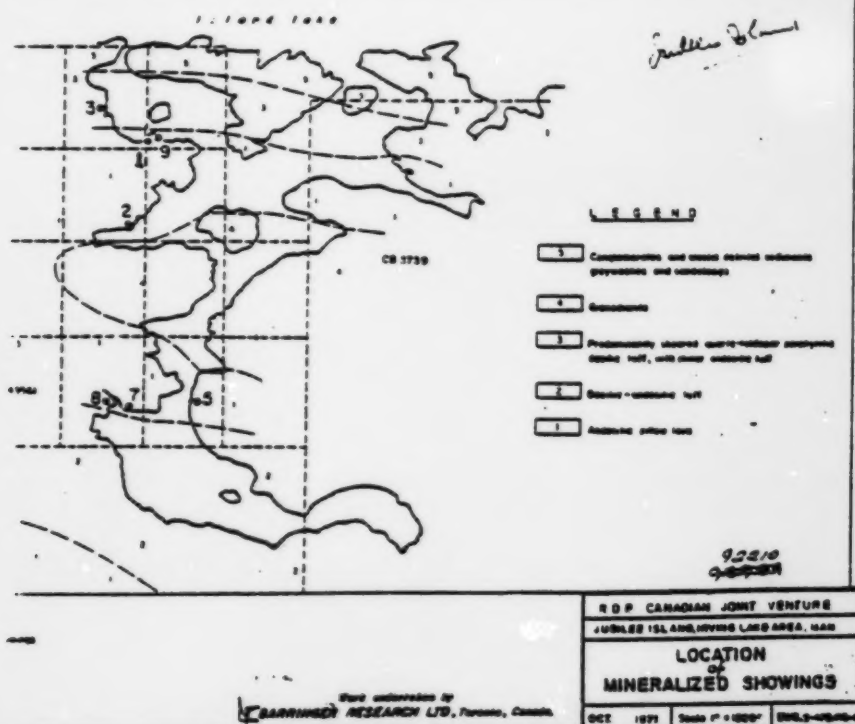
MAP REFERENCES cont'd

- Map 211A, Island Lake area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- #Map DWG.9-470/A5-6, Jubilee Island area, (Location of mineralized showings), Scale 1:15 840, in Non-confidential Assessment File No. 92210, Manitoba Mines Branch.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- *Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

1. South of this area, on CB 4371, a 2.4 m (8 ft) wide horizon of massive pyrite and pyrrhotite was reported on surface (Non-confidential Assessment File No. 92210).

Comp./Rev. PA
By Date 07-90



1959 '0'

PRODUCT Molybdenum

N.T.S. AREA 53E/15 NE

REF. MO 1

NAME OF PROPERTY:

Lomond No. 1

OWNER OR OPERATOR AND ADDRESS

1990 - Thomas A. Hamilton (Estate)
Island Lake, Manitoba
ROB OTO

OBJECT LOCATED: No. 3 post of Lomond No. 1

MINING DIVISION Winnipeg

Lat. 53° 54'

Long. 94° 36.4'

UNCERTAINTY: 500 m

Sec.

Tp. 56, 57

R. 19, 20 EPM

DESCRIPTION OF DEPOSIT

Two major zones and five minor ones were described by Barringer Research Limited (see Remarks).

On the northern part of Lomond No. 1, a quartz-filled shear system in Precambrian granite strikes 100°-110° and dips north. The zone is at least 9 m (10 yards) long, 1.2 m (4 ft) wide, and has a known depth of 3 m (10 ft). Chalcopyrite, with associated azurite, malachite and pyrite, occurs in quartz veins and is disseminated up to 0.3 m (1 ft) on either side of the shear zone. Molybdenite and tourmaline are also found in the quartz.

Another shear zone (the 'central showing') is also in Precambrian granite. The zone strikes at 130° for at least 18 m (20 yards), and dips 60°N. It is 0.9 m (3 ft) wide and at least 1.5 m (5 ft) deep. Chalcopyrite and pyrite with associated molybdenite and sometimes tourmaline, occurs in the quartz-filled shears.

Gold, silver, lead and zinc were noted in assays from both zones (see Remarks).

HISTORY OF EXPLORATION AND DEVELOPMENT

The showings are located on the west shore of the northeast arm of D'Arcis Bay, north of Island Lake, about 225 km southeast of the Hudson Bay railway line.

The deposit was staked in 1955 by T. Hamilton as Lomond No. 1 (W 24638). H.A. Quinn noted a molybdenum-chalcopyrite-tourmaline occurrence in this area (Map 26-1960). In 1960, T. Hamilton staked additional claims in the area (Lomond Nos. 2-10, W 32937 to 45) and grouped them with Lomond No. 1. Work was reported on these claims until 1963. In 1965, Lomond Nos. 7, 9-10 were cancelled. Work continued to be reported on Lomond Nos. 1-6, 8 in 1964-1969, 1971-1972.

Associated minerals or products of value

Copper, tourmaline, silver, gold, lead, zinc.

NAME OF PROPERTY

Lomond No. 1

N.T.S. AREA 53E/15 NE

FILE NO. 321

REF. MO 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Barringer Research Limited, in 1970, held an unrecorded interest in the claims and also held Reservation No. 90 which covered this area.

To date, 447 m³ (15 777 cu ft) of trenching and blasting has been recorded on Lomond No. 1 (W 24638). Work has also been done on Lomond No. 8 (W 32943), about 518 m (1700 ft) southeast of the showing on Lomond No. 1; and also on Lomond No. 4 (W 32939), which is 305 m (1000 ft) southeast of the showing on Lomond No. 8.

Work carried out by Barringer Research Limited in 1970 included prospecting, mapping, soil sampling, lake and stream sediment sampling, trenching, blasting, test-pitting, and a helicopter EM survey. The stream sediment survey indicated some copper and molybdenum anomalies in the vicinity of the central showing. One sample (600 m west-southwest of the central showing) was anomalous in Zn-Cu-Mo-Co. In addition, some samples from the south shore of D'Arcis Bay had high Ni, Zn, Pb values.

In 1970, R.D. Moss of Barringer Research Limited examined two major showings and five minor ones on the Lomond claims (Non-confidential Assessment File No. 91786; see Remarks). The showings were mapped in detail and sampled. Of about 13 samples from Lomond No. 1 (W 24638), all assayed little or no gold and silver, with one exception (Sample C-2) which yielded 59.66 g/t (1.74 oz/ton) Ag, 2.74 g/t (0.08 oz/ton) Au, 0.05% Pb, 0.67% Cu, 0.01% Mo. Copper ranged from less than 0.01 to 0.67%. Molybdenum varied from nil to 0.64%.

Assays from Lomond No. 8 (W 32943) (Sample Nos. C-8, C-12, C-19) were less than 0.34 g/t (0.01 oz/ton) gold, trace silver and less than 0.01% copper, but up to 0.84% molybdenite was found in Sample C-12. C-8 also had 0.02% nickel.

Eleven samples from the central showing (Lomond No. 4) and vicinity gave a maximum gold assay of 5.49 g/t (0.16 oz/ton) for Sample C-18, though all others yielded less than 2.06 g/t (0.06 oz/ton). Silver ranged from 'trace' to 209.83 g/t (6.12 oz/ton). Maximums for copper, molybdenum, and lead were 2.58%, 0.20%, and 0.07%, respectively.

A 13 cm (5 inch) channel sample (Sample C-41) from the eastern showing (Lomond No. 5, W 32940) gave the following assay results:

Au	- 8.23 g/t (0.24 oz/ton)
Ag	- 104.23 g/t (3.04 oz/ton)
Cu	- 0.13%
Mo	- 0.03%

A grab sample (C-73) from the eastern showing gave consistently lower assays, with a maximum of 11.31 g/t (0.33 oz/ton) Ag.

In 1971, detailed mapping of D'Arcis Bay was completed and some rock geochemistry and soil sampling was done. Results of the 1970-1971 assays of rock samples from the D'Arcis Bay showings are summarized as follows (Non-confidential Assessment File No. 91786; see also File No. 99278, non-confidential parts):

NAME OF PROPERTY

Lomond No. 1

N.T.S. AREA 53E/15 NE

FILE NO. 321

REF. MO 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Upper showing (Lomond No. 1):

1970 - 1.2 m (4 ft) of 0.03% Cu, 0.78% Mo.

1971 - 16.5 m (54 ft) of 0.10% Cu, trace Mo, 0.69 g/t (0.02 oz/ton) Au,
3.43 g/t (0.10 oz/ton) Ag.

best value 0.65% Cu, 6.2% Mo, 2.74 g/t (0.08 oz/ton) Au.

Upper central showing (Lomond No. 8):

1970 - 3 m (10 ft) of 0.06% Cu, 0.78% Mo.

1971 - 1.5 m (5 ft) of 0.17% Cu, 0.3% Mo.

Central showing (Lomond No. 4):

1970 - 4.3 m (14 ft) of 0.12% Cu, 0.03% Mo.

1971 - 2 m (7 ft) of 0.12% Cu, 0.06% Mo, 0.69 g/t (0.02 oz/ton) Au, 4.8
g/t (0.14 oz/ton) Ag.

best value 1.4% Cu.

South showing (Lomond No. 5):1971 - 1.2 m (4 ft) of 0.24% Cu, 1.03 g/t (0.03 oz/ton) Au, 0.34 g/t (0.01
oz/ton) Ag.- 7.6 cm (3 inches) of 2.82% Cu, 0.06% Mo, 18.51 g/t (0.54 oz/ton)
Au, 1.03 g/t (0.03 oz/ton) Ag.

Also in 1971, lake silt sampling was repeated and the survey confirmed a distinct silt sample anomaly that had been outlined on the south side of D'Arcis Bay in 1970. In 1972, a ground EM (vertical loop) survey was carried out for Magenta Explorations Limited but results were negative. Also done, was an airborne EM/Mag survey by Questor Surveys Ltd. over part of the Lomond No. 5 claim (Non-confidential Assessment File No. 91786). Work continued to be reported on Lomond Nos. 1-6, 8 in 1973-1974.

In 1975, the Exploration Operation Branch, Manitoba Department of Mines, Resources and Environmental Management, collected 4 bedrock samples and analyzed them for Cu-Zn-Mo-W-Mn. One sample from Lomond No. 1 returned 225 ppm Mo, 290 ppm Cu; one from Lomond No. 8 returned 177 ppm Mo, 574 ppm Cu (Non-confidential Assessment File No. 90001).

Work continued to be reported on Lomond Nos. 1-6, 8 in 1977. In 1978, five years of work was submitted for the Lomond No. 1 claim. The Lomond Nos. 2-8 claims were cancelled in 1978. Bruce Chornoby staked CB 12068 (Greenwell south) over the former Lomond Nos. 2, 4-6, 8-9 claims for Climpy Claims Inc. in 1980. No work was reported and the claim block was cancelled in 1982.

Two years of work was applied on the Lomond No. 1 claim in 1982, followed by ten years of work in 1984.

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 42.
- Herd, R.K. and Ermanovics, I.F. (with contributions by G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 90001, 91786, 99278 (non-confidential parts).
 - b) Unpublished Information Files; 53E (general).
 - c) Mining Recording Files; File No. 46225 (Lomond No. 1); File Nos. 57526 to 34 (Lomond Nos. 2-10).
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-6, 17.
- Neale, K.L., 1984, Stratigraphy and basin evolution of the upper Hayes River and Cochrane Bay groups, Island Lake greenstone belt, Manitoba; Carlton University, M. Sc. Thesis, 177p.
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- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 78.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY

Lomond No. 1

N.T.S. AREA 53E/15 NE**FILE NO.** 321**REF. MO** 1**MAP REFERENCES** cont'd

Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.

Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.

Preliminary Map 1982 I-2, Garden Hill, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.

Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).

Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

#Claim Map Series NE 15, 53E, Scale 1:31 680, circa 1974, Mining Recording, Manitoba Mines Branch.

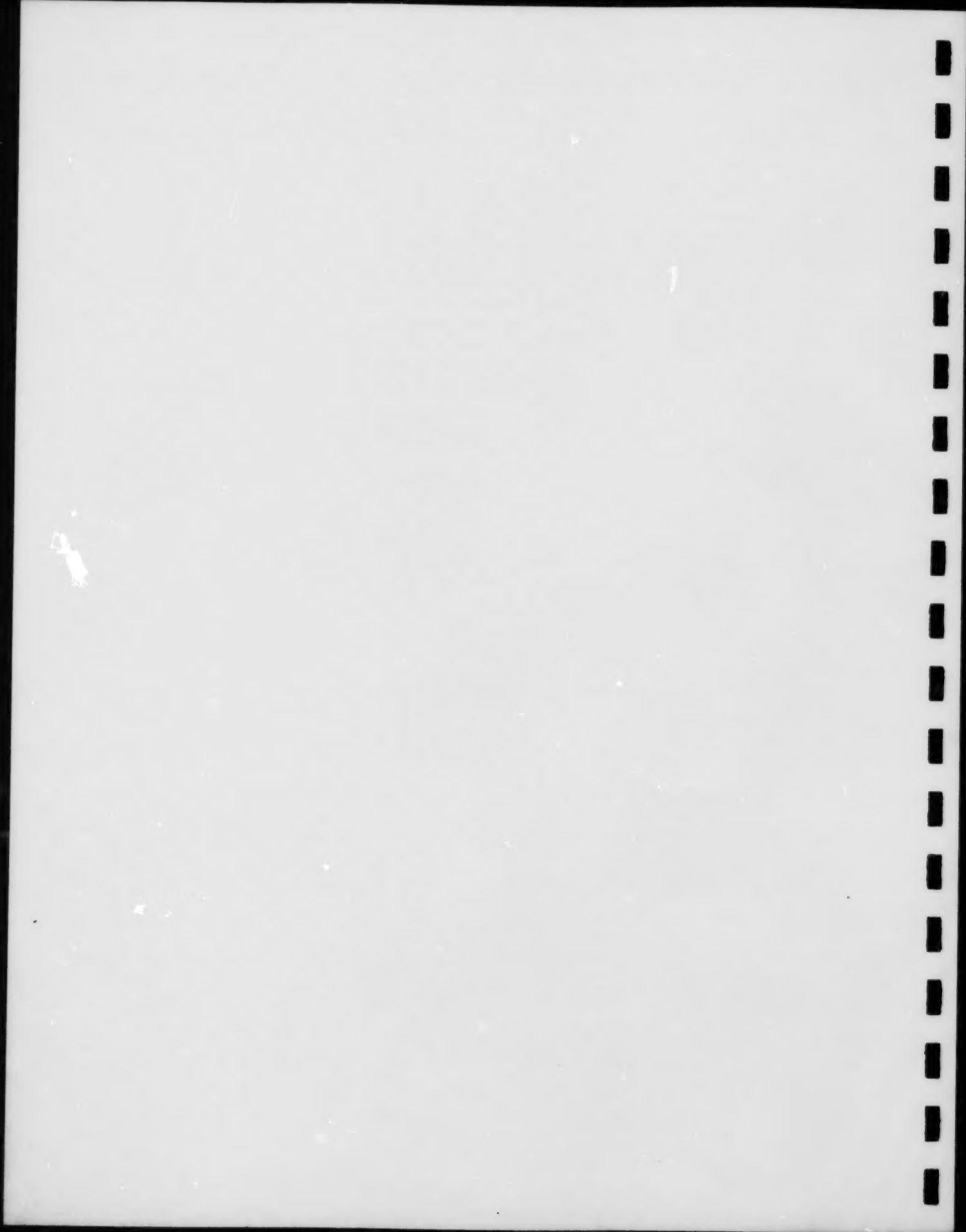
REMARKS:

Barringer Research Limited sampled Lomond Nos. 1, 2, 4, and 8. Assay results are listed in the "General Report of the Geology and Prospecting in the Irving Lake Area, Manitoba, for the R.D.P. Canadian Joint Venture (Moss - 1970)" in the Exploration Reservation No. 90, Non-Confidential Assessment File. Assays from Lomond No. 1 correspond to Barringer's "North Showing" or "Upper Showing". Assays from Lomond No. 8 are their "s.w. of Upper Showing". Samples from the vicinity of the "Central Showing" were probably taken from Lomond No. 4, and perhaps part of Lomond No. 8. The "Lower Showing" is actually east of the central showing. Zinc and lead were noted in some assays, but were always less than 0.09%.

In 1972, lake and stream sediment samples indicated a Cu-Mo anomaly at the base of a small bay in the southeast arm of D'Arcis Bay (Sample #602-604; Non-confidential Assessment File No. 91786).

About 3.2 km northwest, sample #4245 returned 41.5 g/t (1.21 oz/ton) Ag, 0.86% Cu, 0.33% Mo, 0.09% Pb and sample #4608 returned 1.12% Cu, 0.08% Pb, 0.07% Mo (Non-confidential Assessment File No. 91786).

Comp./Rev.	CC	SMH	PA
By Date	03-74	12-74	05-90



PRODUCT Nickel	N.T.S. AREA 53E/15 NE, NW	REF. NI 1
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NAME OF PROPERTY: Nickel-Canter Group	OWNER OR OPERATOR AND ADDRESS 1990 - Inco Limited Manitoba Division Thompson, Manitoba R8N 1P3
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OBJECT LOCATED: centre of Canter No. 1	MINING DIVISION Winnipeg	
Lat. 53° 56.05'	Long. 94° 45.7'	UNCERTAINTY: 500 m
Sec.	Tp. 57	R. 19 EPM

DESCRIPTION OF DEPOSIT

A nickel-copper orebody, reportedly of low grade (Quinn, 1960), is situated in a sheared and serpentized peridotite sill or sills within highly altered volcanics and sediments of the Precambrian Hayes River Group. The sulphide zone is approximately 3048 m (10 000 ft) long, 61 m (200 ft) wide, and 610 m (2000 ft) thick (Quinn, Ibid.). The sill(s) trend southeast parallel to the Island Lake Fault. Millerite, pentlandite, nickeliferous pyrrhotite, pyrite, chalcopyrite, and magnetite are disseminated in the zone. Erythrite was also noted on surface (Ames, 1975).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is approximately 61 m north of Rat Portage, east of Linklater Island in Island Lake, and about 240 km southeast of the Hudson Bay railway line.

The area was mapped by T.A. Oliver in 1951. The deposit was staked as the Canter-Nickel Group (W 19419-19436) of 17 claims in 1952 by Mr. & Mrs. T. Wass. From 1952-1956, 385 m³ (13 598 cu ft) of rock was trenched or blasted on these claims. The claims were assigned (50%) to Rex Island Mining Syndicate and optioned by Canadian Nickel Company Limited. In 1956, a geophysical survey which covered these claims showed many anomalies in the area. It led to the staking of several hundred claims (Ile and Ces groups) in the immediate area by Canadian Nickel Company Limited. The claims were assigned to The International Nickel Company of Canada, Limited, in 1958. A magnetometer survey was done in 1959.

From 1956 to 1960 at least 12 802 m (42 000 ft) of diamond drilling was completed which outlined the ore zone.

The claims were leased in 1961.

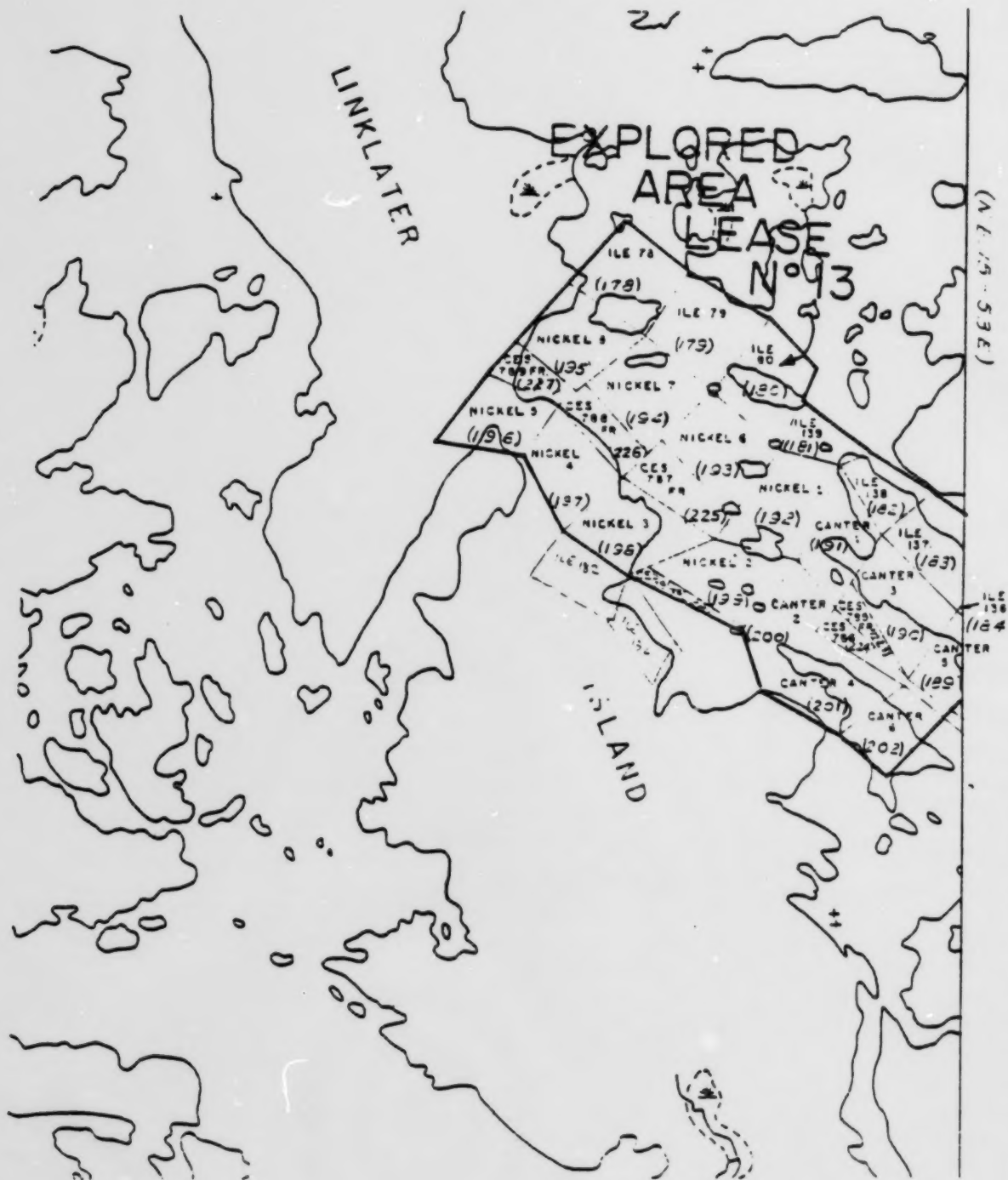
Associated minerals or products of value
copper

NAME OF PROPERTY
Nickel-Canter Group

N.T.S. AREA 53E/15 NE, NW

FILE NO. 322

REF. NI 1



HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

The following claims were staked over or around the deposit and leased:

Canter Nos. 1-9	- W 19419-27
Nickel Nos. 1-8	- W 19428-35
Ile Nos. 78-80	- W 24943-45
Ile Nos. 105, 106	- W 26519-20
Ile Nos. 113, 114	- W 26527, 28
Ile Nos. 121, 122	- W 26535, 6
	- (W 26501, 2
Ile Nos. 127-139	- (W 26541-49
	- (W 26568, 9
Ile Nos. 182-187	- W 26558-63
Ces Nos. 785-793	- W 32707-15

In 1976, Explored Area Lease No. 13 covering the Cantor 1-6, Nickel 1-8, Ile 78-80, 136-138, Ces 785-790 claims was issued to Inco Limited. Claims near the south boundary of this lease were cancelled: these included Cantor 7-9, Ile 105-106, 113, 114, 121, 122, 127-135, 182-187, Ces 791-793.

Some rock sampling was done by Ames (1975) for a thesis study. L. Solkoski and S. Mabbula (Manitoba Government) examined the area in 1977, and noted a 4.6 m (15 ft) wide mineralized zone of massive pyrite which had been trenched on the Nickel 1 claim. The area was examined by Theyer (1977, 1978), and spinifex-textured ultramafic rock was found east of Linklater Island. Rock sampling was completed in 1982 (Theyer, 1982). One sample (#207) returned up to 6800 ppm Ni, 1650 ppm Cr, 520 ppm Cu (Theyer, 1985).

The area near the south boundary of Explored Area Lease No. 13 was staked under Link 4, 5, 7 (CB 13317, 18, 20) by W. Bruce Dunlop Limited (N.P.L.) in 1982. These claim blocks were cancelled in 1985.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch, p. 54-55, 60.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 42-43.
- Manitoba Mines Branch:
- Unpublished Information Files; 53E (general).
 - Mining Recording Files; Canter Nos. 1-9, File Nos. 40732-40; Nickel Nos. 1-8, File Nos. 40741-48; Ile Nos. 78-80, 105, 106, 113, 114, 121, 122, 127-139, 182-187, File Nos. 46702-4, 48288, 9, 96, 7, 48304, 5, 10-21, 27-32; Ces No. 785-793, File Nos. 57230-8.
 - Non-confidential Assessment Files; File Nos. 99277, 79, 83 (non-confidential parts).

REFERENCES cont'd

- Neale, K.L., 1984, Stratigraphy and basin evolution of the upper Hayes River and Cochrane Bay groups, Island Lake greenstone belt, Manitoba; Carlton University, M. Sc. Thesis, 177p.
- Neale, K.L. and Weber, W., 1981, Island Lake (parts of 53E/15 and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, p. 38-42.
- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake-Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
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- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Quinn, H.A., and Meinert, R.S., 1959, The Island Lake Series; The Precambrian, Vol. 32, No. 4, p. 16-25, 34.
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
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- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Turek, A., Carson, T.M., Smith, P.E., Van Schmus, W.R. and Weber, W., 1986, U-Pb zircon ages for rocks from the Island Lake greenstone belt, Manitoba; Canadian Journal of Earth Sciences, v. 23, No. 1, p. 92-101.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).

NAME OF PROPERTY
Nickel-Canter Group

N.T.S. AREA 53E/15 NE, NW

FILE NO. 322
REF. NI 1

MAP REFERENCES cont'd

- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map, Island Lake-Red Sucker Lake area (west half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1982 I-1, Waasagomach, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.
- Figure 4, Location of ultramafic rocks in the Linklater Island area, Scale 1:31 250 - Accompanying Report by Theyer (1985), Manitoba Mineral Resources Division
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NE and NW 15, 53E, Scale 1:31 680, circa 1974, Mining Recording, Manitoba Mines Branch.

REMARKS

1. Long intersections of talc-chlorite-schist were reported on Ile 132 and 182: up to 98 m (322 ft) in ddh 14022 (Ile 132), and up to 86 m (283 ft) in ddh 13249 (Ile 182) (non-confidential parts of Assessment File No. 99283).
2. A drill hole (DDH 2-76), west of Linklater Island, intersected disseminated chalcopryrite mineralization from 31 to 143 m (Non-confidential Assessment File No. 91502).

Comp./Rev.		CC	PA
By Date	12-63	03-74	06-90



PRODUCT	Lead	N.T.S. AREA	53E/15 NW	REF. PB 1
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NAME OF PROPERTY:	OWNER OR OPERATOR AND ADDRESS
Ile No. 104	1990 - Open

OBJECT LOCATED:	showing	MINING DIVISION	Winnipeg
Lat.	53° 54.75'	Long.	94° 45.3'
Sec.		Tp.	57
		UNCERTAINTY:	100 m
		R.	19 EPM

DESCRIPTION OF DEPOSIT

A mineralized zone of minor disseminated pyrite and galena, with a few thin veinlets of galena, is contained in quartz and silicified andesite of the Precambrian Hayes River Group. Godard (1963, Locality 11) states the zone has "no apparent regular borders or lateral continuity....".

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is situated at the tip of a point of land on the east shore of Linklater Island in Island Lake, about 240 km southeast of the Hudson Bay railway line.

In 1956, W. Cordell staked the deposit as Ile No. 104 (W 26518) and Ile No. 107 (W 26521) and assigned the claims to Canadian Nickel Company Limited. A magnetometer survey was done in 1959.

Godard (1963) noted the deposit as "Locality No. 11" on Map 59-3A. His assays for silver and gold were negative.

The claims were cancelled in 1963.

The area was examined by L. Solkoski and S. Mabbula (Manitoba Government) in the summer of 1977. Galena and pyrite were noted at the north tip of the point of land, on the former Ile No. 107 claim (see Remarks).

CB 13319 (Link 6) was staked by W. Bruce Dunlop Limited (N.P.L.) in 1982. That year, a rock sampling program was completed in the Linklater Island region by Theyer (1982). The claim block was cancelled in 1985.

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- Manitoba Mines Branch:
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- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55.
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- Turek, A., Carson, T.M., Smith, P.E., Van Schmus, W.R. and Weber, W., 1986, U-Pb zircon ages for rocks from the Island Lake greenstone belt, Manitoba; Canadian Journal of Earth Sciences, v. 23, No. 1, p. 92-101.
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MAP REFERENCES

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- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 3553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY

Ile No. 104

N.T.S. AREA 53E/15 NW

FILE NO. 323

REF. PB 1

MAP REFERENCES cont'd

- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1982 I-1, Waasagomach, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series NE 15, 53E, Scale 1:31 680, circa 1963, Mining Recording, Manitoba Mines Branch.

REMARKS

In 1977, L. Solkoski and S. Mabbula (Manitoba Government) sampled an area 300 to 600 m south (former Ile No. 103), where they found several chalcopyrite-pyrrhotite-pyrite occurrences and one 4.6 m (15 ft) wide zone of cpy-po-py mineralization. A pyrite-pyrrhotite-lead (?) occurrence noted at the north tip of an island to the east (former Ile No. 104) was also sampled.

Comp./Rev.			CC	PA
By Date	12-63	06-71	03-74	05-90

PRODUCT	Pyrite	N.T.S. AREA	53E/15 SE, NW	REF.	PYR 1
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NAME OF PROPERTY:	OWNER OR OPERATOR AND ADDRESS
Lin Group	1990 - Open

OBJECT LOCATED:	Centre of Lin No. 60	MINING DIVISION	Winnipeg		
Lat.	53° 52.2'	Long.	94° 44.1'	UNCERTAINTY:	500 m
Sec.		Tp.	56	R.	19 EPM

DESCRIPTION OF DEPOSIT

The deposit is in iron formation found in four drill holes, which were probably drilled through Precambrian sediments of the Hayes River Group. Some sulphides were found within the iron formation (Non-confidential Assessment File No. 91153). Rock types intersected by some of the drill holes include: slate, tuff, greywacke, quartzite, talc schist, peridotite, sediments, iron formation (Theyer, 1980, p.61).

HISTORY OF EXPLORATION AND DEVELOPMENT

The Lin claims are in two groups, one (Lin Nos. 60, 68) is located about 2.4 km south of the southwest end of Stevenson Island (formerly known as Forestry Island) and the other (Lin Nos. 21, 23) is 3.2 km southwest of the south end of Linklater Island in Island Lake about 241 km southeast of the Hudson Bay railway line.

The first group was staked first as Asbestos No. 36 (W 21326) by E. Hunt in 1955 and the next year assigned to Rex Island Mining Syndicate and optioned to Canadian Nickel Company Limited. It was assigned to The International Nickel Company of Canada, Limited, in 1958. An unknown amount of work was done on the claims.

The second group of Lin claims was staked as Bar 6 (W 27070) by Ruth Bennett in 1956.

The Lin claims (W 31117, 25, 31078, 80) were staked in 1959 by R. Pronteau and J.K. Wilson and assigned to Canadian Nickel Company Limited. Four diamond drill holes were completed that year with a total footage of 1181 m (3875 ft) (Non-confidential Assessment File No. 91153). In 1960, Inco Limited drilled one hole on Lin 10 (previously Bar 5) and intersected bands of sulphide from 91 to 102 m (300-336 ft). The claims were cancelled in 1962.

T.A. Hamilton staked CB 13160 (Matrix) over the first group of claims in 1981 and cancelled it in 1983.

In 1982, Link 27 (W 46665) was staked over the second group of claims for W. Bruce Dunlop Limited (N.P.L.). It was cancelled in 1985.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), p. 15
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1820.
- Godard, J.D., 1963, Geology of the Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 48-49, 60-61.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, p. 4-5.
- Turek, A., Carson, T.M., Smith, P.E., Van Schmus, W.R. and Weber, W., 1986, U-Pb zircon ages for rocks from the Island Lake greenstone belt, Manitoba; Canadian Journal of Earth Sciences, v. 23, No. 1, p. 92-101.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.

NAME OF PROPERTY

Lin Group

N.T.S. AREA 53E/15 SE, NW

FILE NO. 324

REF. PYR 1

MAP REFERENCES cont'd

Preliminary Map 1982 I-1, Waasagomach, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, and K.L. Neale, Manitoba Mineral Resources Division.

Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P.

Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.

Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

#Claim Map Series SE 15, NW 15, 53E, Scale 1:31 680, circa 1962, Mining Recording, Manitoba Mines Branch.

REMARKS

A sulphide occurrence is shown on an island east of Lin 60 on Map 59-3A by Godard (1963).

Comp./Rev.	CC	PA
By Date	03-74	05-90

PRODUCT Zinc

N.T.S. AREA 53E/15 SE

REF. ZN 1

NAME OF PROPERTY
CB 6532OWNER OR OPERATOR AND ADDRESS
1990-Open

OBJECT LOCATED Drill hole BA 10-76

MINING DIVISION Winnipeg

Lat. 53° 50.28'

Long. 94° 40.43'

UNCERTAINTY: 300 m

Sec.

Tp. 56

R. 19 EPM

DESCRIPTION OF DEPOSIT

Precambrian andesitic pillow lava with disseminated pyrite, pyrrhotite and chalcopyrite and with quartz-carbonate filled shears containing pyrrhotite, pyrite, chalcopyrite and sphalerite was mapped on a group of islands just east of drill hole BA 10-76 (Non-confidential Assessment File No. 92318).

Drill hole IL 75-1 intersected dacitic tuff and andesite with quartz and quartz-carbonate filled fractures, quartz-feldspar porphyry and crystal tuffs. Mineralization consists mainly of disseminated pyrrhotite and pyrite with minor chalcopyrite and sphalerite, concentrated in the andesite and in quartz along the upper contact of the dacitic tuffs and andesites.

Drill hole BA 10-76 intersected quartz-sphalerite-pyrrhotite-chalcopyrite veins averaging 3 mm in width, in andesite, from 39 to 78 m (127.3 to 254.6 ft). Drill core assays indicated a copper-rich top with up to 0.14% Cu and a zinc-rich base with up to 0.2% Zn over 4.6 m (15 ft) (Non-confidential Assessment File No. 92318).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located a few hundred metres west of a group of small islands at the east end of Jubilee Island, in Island Lake, about 3.5 km north of Confederation Island, 2 km southwest of Stevenson Island, and 250 km southeast of the Hudson Bay railway line.

In 1957 an airborne EM survey was done by Canadian Nickel Company Limited under Airborne Permit No. 19 (Non-confidential Assessment File No. 91624). An airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 in 1970 (Non-confidential Assessment File No. 91684).

Canadian Occidental Petroleum Ltd. staked CB 6532 over the deposit in 1974. A combined electromagnetic (HLEM) and magnetic survey was carried out by Barringer Research Limited on behalf of Canadian Occidental Petroleum Ltd. that year, and an electromagnetic conductor was outlined in the area (Non-confidential Assessment File No. 92319).

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper.

NAME OF PROPERTY
CB 6532

N.T.S. AREA 53E/15 SE

FILE NO. 1031
REF. ZN 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Shoreline mapping and rock chip sampling was also carried out that year by Canadian Occidental Petroleum Ltd. (Non-confidential Assessment File No. 92318, 19). A sample of andesitic tuff with quartz-carbonate filled shears carrying sphalerite and chalcopryrite returned 880 ppm Cu and greater than 20 000 ppm Zn. A sample of quartz-feldspar porphyry with disseminated pyrite and some pyrrhotite and chalcopryrite returned 740 ppm Cu and 1100 ppm Zn (Non-confidential Assessment File No. 92318).

In 1975, a 109 m (357 ft) deep hole (IL 75-1) was drilled to test the EM conductor. Up to 4000 ppm Cu over 1.5 m (5 ft) of sheared dacitic tuff at a depth of 34 m (112 ft) was reported. Some massive sulphide sections in andesite (occasionally in dacitic tuff) yielded greater than 20 000 ppm Zn, 3000 ppm Cu over 2.5 - 7.6 cm (1-3 inches) at depths of 55 - 65 m (182.2 - 213.8 ft) and 80 m (263.4 ft) (Non-confidential Assessment File No. 92318).

In 1976, drill hole BA 10-76 was collared 97 m (320 ft) east of the 1975 hole and drilled to a depth of 108 m (355 ft) to test the eastward extension of the EM conductor. Disseminated pyrrhotite and chalcopryrite mineralization was found in andesite from 10 to 77 m (32.9 - 254.6 ft). From 9 to 55 m (30-180 ft), the average copper value was about 700 ppm with up to 0.14% Cu. From 15 to 108 m (50-355 ft), zinc values were greater than 0.1%. Drill core assays of 0.35% Zn over 1.5 m (5 ft) and 0.2% Zn over 5 m (15 ft) were reported (Non-confidential Assessment File No. 92318). The claim block was cancelled in 1977.

Link 24 (W 46642) was staked by P. Dunlop for W. Bruce Dunlop Limited (N.P.L.) in 1982 and cancelled in 1985.

In 1986 Byron Wiebe staked Breeze 2 (W 50591). The claim was cancelled in 1989.

REFERENCES

- Ames, A., 1975, Ultramafic rocks of the Island Lake greenstone belt, northeastern Manitoba; University of Toronto, B.Sc. Thesis (unpublished), 64p.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P. and Weber, W., 1983, Island Lake project (parts of 53E/15, and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1983, p. 63-69.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W. Fyson), 1976, Geology of Island Lake map-area (53E), Manitoba and Ontario; Geological Survey of Canada, Report of Activities, Part A, Paper 76-1A, p. 393-398.

REFERENCES cont'd

Manitoba Mines Branch:

- a) Non-confidential Assessment Files; File Nos. 92318, 92319.
 - b) Unpublished Information Files; 53/16.
- McMurchy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-9, 17.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/16).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- #Map, Project Barrex, Grid C, (Location of DDH BA 10-76), Scale 1:4800, in Non-confidential Assessment File No. 92318, Manitoba Mines Branch.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- *Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY
CB 6532

N.T.S. AREA 53E/15 SE

FILE NO. 1031
REF. ZN 1

REMARKS

1. Copper (0.27% over 1.5 m), zinc (up to 0.20%), silver (3.09 g/t), and galena was reported to occur about 2.9 km southwest on a group of islands in CB 4947, CB 4955, and Kappa 2 (Non-confidential Assessment File Nos. 92318, 92319, 92244, file 1 of 4).
2. About 8 km southeast, near the south end of Confederation Island, sample assays of up to 13 700 ppm Zn, 24 000 ppm Pb, 23.99 g/t (0.7 oz/ton) Ag and 2.06 g/t (0.06 oz/ton) Au were reported. Up to 8300 ppm Zn, 1100 ppm Ni was reported for a sample from a small island, 400 m north of the west end of Henderson Island (Non-confidential Assessment File Nos. 92139, 92244 (file 3 of 4); Unpublished Information File, 53E/general).

Comp./Rev. PA
By Date 07-90

PRODUCT Silver

N.T.S. AREA 53E/15 NE

REF. AG 3

NAME OF PROPERTY:

Bella Group
(Reservation No. 90)

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED: Map Symbol 5

MINING DIVISION Winnipeg

Lat. 53° 55.65'

Long. 95° 34.74'

UNCERTAINTY: 500 m

Sec.

Tp. 57

R. 20 EPM

DESCRIPTION OF DEPOSIT

The deposit is located in quartz veins and the surrounding Precambrian granite. The granite is locally foliated at its contact with Precambrian sediments of the Hayes River Group. Godard (1963, Locality 5) states "The zone is approximately 40 feet (12 m) wide by 200 feet (61 m) in length". Quartz stringers are roughly parallel to the metasediments.

The highest assays for silver and copper (Non-confidential Assessment File No. 91786) came from the quartz, which also contains tourmaline and pyrite.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property was located at the north and east end of Bella Lake, approximately 1.6 km south of Cochrane Bay of Island Lake, and 266 km southeast of Earchman.

McMurphy (1944) reported that T. Wass made the first discoveries (probably around 1938) near the northwest corner of Bella Lake (see Remarks). According to McMurphy (1944), "A few quartz-tourmaline stringers were seen 250 feet (76 m) along the strike of the zone described. Although good results are reported from panning the quartz tourmaline stringers, only a trace and 17 cents were obtained from two grab samples assayed."

Bella Nos. 1-15 (W 1335-49) were variously staked in 1932 by E.W. Middleton, A.M. Berry, and John McGeorge. No work was reported before the claims were cancelled in 1934.

H.A. Quinn noted a pyrrhotite occurrence in the area (Map 26-1960). In 1960, Amos Wood staked the Garden Nos. 1-9 (W 32761-66, W 33633-35) claims. Some work was reported in 1961. The claims were cancelled in 1962.

Associated minerals or products of value

Copper, molybdenum, tourmaline, soapstone, gold.

NAME OF PROPERTY

Bella Group (Reservation No. 90) N.T.S. AREA 53E/15 NE

FILE NO. 316

REF. AG 3

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Barringer Research Limited carried out a regional geochemical sampling program in 1969 and found a sample that was anomalous in Cu, Mo, Ni (apparently located on the north shore of Irving Lake). The Company followed up these results with a detailed geochemical sampling program over a 4.8 km (3 mi) diameter of land centred on Irving Lake. Some prospecting was done by J. Tower. The presence of Cu-Mo shears in massive granite (according to J.L. Walker and W. Walker) and the positive results of the 1969 survey, suggested a potential for Cu-Mo porphyry mineralization.

Exploration Reservation No. 90 was issued to Barringer Research Limited in 1970. Barringer geologically mapped the area, made an aeromagnetic survey, prospected, and sampled rocks as well as stream sediments. One stream sediment sample from the north part of Bella Lake was anomalous in molybdenum. The following rock sample assays were reported (Non-confidential Assessment File No. 91786):

Au	nil to 0.69 g/tonne (0.02 oz/ton)
Ag	tr to 13.37 g/tonne (0.39 oz/ton)
Cu	less than 0.01 to 0.21%
Mo	less than 0.01 to 0.01%
Pb	less than 0.01 to 0.02%
Zn	less than 0.01 to 0.01%
Ni	less than 0.01 to 0.01%

A bedrock sampling program was carried out along the eastern shore of Bella Lake in 1971 by Barringer for Magenta Explorations Limited: results of 35 samples, analyzed by AA5 atomic absorption (HClO_4), failed to confirm the existence of Cu-Mo porphyry mineralization. Detailed mapping was carried out in 1971.

A geological reconnaissance survey was carried out by V.J. Sopuck and R.D. Moss of Barringer Research Limited in 1972. They reported that "Numerous sulphide zones in mafic volcanic rocks are located on the east arm of Bella Lake....One (sample of T. Hamilton)...revealed greater than 1000 ppm Cu and 500 ppm Ni". They also noted an outcrop of soapstone on the northeast shore of Bella Lake at the contact between diorite and granite: the soapstone is of high quality and has been used for carving by the people of Garden Hill. In 1972 an airborne EM/Mag survey was flown by Questor Surveys Limited for Magenta Explorations Limited (Non-confidential Assessment File No. 91786). The area reopened for staking on January 16, 1973.

In 1975, the Manitoba Government mapped the area at a scale of 1:15 840 and collected 278 bedrock samples from the region (Non-confidential Assessment File No. 90001). One sample from the north part of Bella Lake returned 98 ppm Zn, 618 ppm Mn. Results indicated a large area of Cu-Mo porphyry type mineralization in the south and central part of Bella Lake (see Remarks).

On February 16, 1976, a permit to explore for minerals (No. 2) was taken out by the Exploration Operation Branch, Manitoba Department of Mines, Resources and Environmental Management. Twenty-three shallow holes were drilled in February and March in the central part of Bella Lake but results were negative (see Remarks). The permit was cancelled in June 1977.

NAME OF PROPERTY

Bella Group (Reservation No. 90) N.T.S. AREA 53E/15 NE

FILE NO. 316

REF. AG 3

REFERENCES

- Ermanovics, I.F., Park, R.G., Hill, J. and Goetz, P., 1975, Geology of the Island Lake map area, Manitoba and Ontario (53E); Geological Survey of Canada, Paper 75-1, Part A, p. 311-316.
- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
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- Herd, R.K. and Ermanovics, I.F., 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398. Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 90001, 91786.
 - b) Unpublished Information Files; 53E (general); 53E/15.
 - c) Mining Recording Files; File Nos. 57268 to 73, 58591 to 93 (Garden No. 1-9).
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-6, 17.
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- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/general).
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- Turek, A., Carson, T.M., Smith, P.E., Van Schmus, W.R. and Weber, W., 1986, U-Pb zircon ages for rocks from the Island Lake greenstone belt, Manitoba; Canadian Journal of Earth Sciences, v. 23, No. 1, p. 92-101.
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- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY

Bella Group (Reservation No. 90) N.T.S. AREA 53E/15 NE

FILE NO. 316

REF. AG 3

MAP REFERENCES cont'd

- *Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map 1982 I-2, Garden Hill, (Geology), Scale 1:20 000, by W. Weber, C.R. McGregor, K.L. Neale, and H.P. Gilbert, Manitoba Mineral Resources Division.
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series NE 15, 53E, Scale 1:31 680, circa 1972, Mining Recording, Manitoba Mines Branch.

REMARKS

1. Godard (Map 59-3A) located map symbol 5 to the north of the Bella group. No claims have yet been staked at that location, however it was covered by Exploration Reservation No. 90. Molybdenum, noted at the map symbol, gave very low assays (see History of Exploration and Development).
2. A 1975 bedrock sampling program by the Manitoba Government found two copper and three molybdenum anomalies. Maximum assays obtained were 3850 ppm Cu, 958 ppm Mo (2.75 km south and southeast of Locality 5). According to a report by R.A. Haskins, copper mineralization outcrops in an area 1800 m long and 300 m wide: bedrock copper content ranged from 80 to 900 ppm in 20 grab samples and averaged 400 ppm in 5 bulk samples. East of this area, is a surface exposure of molybdenum mineralization over an area 1350 m long and 540 m wide: Mo seams up to 1 cm thick were observed; six grab samples returned 0.36% to 0.76% MoS₂ (Non-confidential Assessment File No. 90001). 23 holes were drilled in the central part of Bella Lake in 1976 but assay results showed 0.005-0.065% Cu; one hole returned 0.06% MoS₂ over 1 m (Non-confidential Assessment File No. 90001). A tin anomaly (200 ppm Sn) was found on a small lake about 945 m (3100 ft) west of the copper zone (Report by R. Haskins, in Manitoba Mines Branch, Unpublished Information File, 53E/15).
3. About 5.5 km west-southwest, sample #4607 returned 24 g/t (0.7 oz/ton) Ag, 0.14% Cu, 0.08% Pb (Non-confidential Assessment File No. 91786). About 3.7 km west-southwest, sample #4245 had 41.5 g/t (1.21 oz/ton) Ag (53E/15 MO 1, remarks).

Comp./Rev.	SMH	BR	PA
By Date	12-74	07-88	05-90

PRODUCT Pyrite

N.T.S. AREA 53E/15 SE

REF. PYR 2

NAME OF PROPERTY:

Confederation Island East

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED: Au showing

MINING DIVISION Winnipeg

Lat. 53° 48.5'

Long. 94° 34.83'

UNCERTAINTY: 100 m

Sec.

Tp. 55, 56

R. 20 EPM

DESCRIPTION OF DEPOSIT

Altered andesitic volcanic rocks of the Precambrian lower Hayes River Group contain disseminated pyrite with minor pyrrhotite and chalcopyrite and a trace of gold for a length of 4.6 m (15 ft) and a width of 1.8 m (6 ft).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit was noted by J.D. Godard in 1963 on Map 59-3A, as "Locality No. 9". The deposit is on the south shore of a small island, approximately 402 m north of the northeast shore of Confederation Island in Island Lake, about 257 km southeast of the Hudson Bay railway line.

The Manitoba Government examined the area in 1976 and noted two copper indications on adjacent islands (Petak, 1976). The small island was examined in 1977 by L. Solkoski (Manitoba Government) who noted disseminated pyrite-chalcopyrite concentrated in patches, mainly along foliation and fracture planes (unpublished field notes, Geological Services, Manitoba Energy and Mines).

The following stakings were recorded by Ralph Birch:

<u>Year</u>	<u>Claim</u>
1980-1982	Apex 7 (CB 11984)
1984-1986	Troy 5 (W 49269)
1986-1988	Alex 6 (W 50587)

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1820.
- Gilbert, H.P. and Weber, W., 1983, Island Lake project (parts of 53E/15, and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1983, p. 66.

Associated minerals or products of value
gold, nickel.

NAME OF PROPERTY

Confederation Island East

N.T.S. AREA 53E/15 SE

FILE NO. 325

REF. PYR 2

REFERENCES cont'd

- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 43.
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4, 9.
- Petak, H.W., 1976, Island Lake (53E/15 SE, 16 SE & SW and 53F/12 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 71-73.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Weber, W., Gilbert, H.P., Neale, K.L., and McGregor, C.R., 1982, Island Lake (53E/15); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1982, p. 34-43.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- Map 53E/15, Island Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4041G, Island Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 3553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- #Map 59-3A, Island Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1983 I-1, Island Lake, (Geology), Scale 1:20 000, by H.P. Gilbert, K.L. Neale, W. Weber, M.T. Corkery and C.R. McGregor, Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series SE 15, 53E, Scale 1:31 680, circa 1980, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY

Confederation Island East

N.T.S. AREA 53E/15 SE**FILE NO.** 325**REF.** PYR 2**REMARKS**

1. Location of the occurrence is taken from a field sketch map by L. Solkoski (Manitoba Government).
2. McMurchy (1944) reported a gold indication on the north shore of a large island located north of the east end of Confederation Island.
3. A quartz-plagioclase porphyry dyke with native copper, chalcopyrite and malachite was reported at the isthmus of Richardson Island (Gilbert and Weber, 1983, p. 66).

Comp./Rev.

CG

PA

By Date

02-74

05-90

PRODUCT GOLD

N.T.S. AREA 53E/16 SE

REF. AU 1

NAME OF PROPERTY

Island Lake Mine
(Jack of Diamonds)

OWNER OR OPERATOR AND ADDRESS

1990-W. Bruce Dunlop Limited
(N.P.L.)
201-2639 Portage Avenue
Winnipeg, Manitoba
R3J 0P7

OBJECT LOCATED Main Shaft

Mining Division Winnipeg

Lat. 53° 47.0'

Long. 94° 12.6'

UNCERTAINTY: 100 m

Sec.

Tp. 55

R. 22 EPM

DESCRIPTION OF DEPOSIT

The deposit is situated in altered sedimentary and volcanic rocks of the Precambrian Hayes River Group, which are locally intruded by granitic and porphyritic bodies. McMurchy (1944) was the first to describe the mineralization in the mine area; the underground workings were inaccessible and many of the trenches had collapsed, limiting his mapping to outcrops. He observed several sulphide-bearing quartz veins up to 1.5 m wide, an "area" with numerous lenses and stringers of quartz, and two "large masses" of "sparsely mineralized" quartz. More recently, Theyer (1981) mapped the surface geology and described several zones of intense silicification, pyritization and carbonatization.

Mineralization consists predominantly of pyrite and pyrrhotite with lesser amounts of galena, arsenopyrite and locally sphalerite. Muckpiles by the shaft contain some visible gold. According to Parsons et al. (1934), the quartz contains pyrite, galena, freibergite, chalcopyrite, gold, and silver, in order of deposition. "The spectrographic analyses detected....the silver occurs mainly in freibergite usually within the galena; that probably most or all of the gold occurs in the native state in the sphalerite; and small amounts of cadmium are present in the freibergite and sphalerite."

The rocks in the mine area are tightly folded and display a well developed axial planar foliation. Godard (1963) reported that the deposit occurs "on the south limb of the major east-trending syncline of the area and on the extension of a strong northeast-trending anticlinal cross-fold. Numerous small drag-folds and faults with displacement of a few inches were encountered in the mine workings (McMurchy, 1944). Much of the rock was strongly fractured and sheared, a condition which interfered with stoping efforts at the mine. One of the quartz veins on Gold Island and on the island to the west appears to have been cut off by faulting. On and between two small islands south of the mine site there are a great many quartz stringers which follow the drag-folds in the sedimentary rocks." Theyer (1981) suggested that the gold may have been concentrated in quartz veins in the hinges of folds.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Silver, lead, zinc, copper, cadmium

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the east shore of Gold Island, about 1.6 km west of Heart Island in Island Lake, about 241 km southeast of the Hudson Bay railway line. This was the original discovery in the Island Lake area.

H.S. Cowan and J.G. Reahill made the original discovery in 1931. I.H. Wass, J.S. Reahill, and A.S. Bellingham staked the Jack of Diamonds (W 249-54), Lucky Shamrock (W 264, 5) and Billy Boy (W 282-8) Groups of claims that year on a group of islands near Sagawitchewan Bay. A vein was apparently traced over 1372 m (4500 ft) across three islands and was 1.8-3.6 m (6-12 ft) wide. Pilot samples from this group of claims averaged \$150 gold/ton. On the Billy Boy claims, two grab samples of blue quartz ran \$196 and \$12.23 gold per ton (Newspaper clipping December 24, 1931 in Island Lake Mines Limited, Corporation File). Several claims were optioned to Ventures Limited which carried out a sampling program on Gold Island in 1931. Results were as follows (Manitoba Mines Branch, 4th Annual Report):

<u>Vein</u>	<u>Width Sampled</u>	<u>Gold value per ton*</u>
1	0.5 m (1.5 ft)	\$12
2	1.5 m (5 ft)	\$26.40
3	1.4-4.6 m (4.5-15 ft) in 10 samples	\$0.20-46.60
4	1-18 m (4-60 ft) in 3 samples	\$11.70-52.80

*calculated at \$20.67/oz.

Island Lake Mines Limited was incorporated on August 4, 1932, under control of Ventures Limited, to explore this group of claims.

In 1931, 31 holes were drilled with a total footage of 1755 m (5759 ft). These were spaced at about 7.6 to 15 m (25 to 50 ft) and covered the length of the ore zone for 518 m (1700 ft) along the strike. Trenching amounted to 306 m (1005 ft). In 1932, samples of ore sent to the Ore Dressing laboratory returned the following assays (Parsons et al., 1934):

Lot	Weight kg (lbs)	Au g/t (oz/ton)	Ag g/t (oz/ton)	Cu %	Pb %	Zn %	Fe %	As %
1	299 (660)	49.0 (1.43)	101.8 (2.97)	0.18	3.35	2.75	3.55	
2	190 (420)	47.9 (1.40)	135.7 (3.96)	0.28	3.63	2.95		
3A	372 (820)	58.9 (1.72)	154.2 (4.50)	0.28	1.74	2.14		0.25
4	440 (970)	23.3 (0.68)	63.7 (1.86)	0.07	0.90	1.50	3.50	
5	154 (340)	15.7 (0.46)	48.7 (1.42)	0.09	0.47	1.80		

A two-compartment shaft had been sunk to 9.7 m (32 ft) by the end of 1932. "An additional 3,094 feet (943 m) of drilling was done ... on the West Island zone about 2,000 feet (610 m) northwest of Gold Island and on the J.D. group of claims to the east. ... (In 1933) shaft sinking was continued to a depth of 259 feet (79 m). Levels were established at 140 feet (43 m) and 240 feet (73 m).... By the end of December 1933, 3,195 feet (974 m) of development work, 3,412 feet (1040 m) of surface diamond drilling and 3,552 feet (1083 m) of underground diamond drilling had been completed." (Godard, 1963).

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1934, at the first level 277 m (910 ft) of cross-cutting and raising, and at the second level 131 m (429 ft) of drifting and cross-cutting, and 481 m (1577 ft) of diamond drilling was completed. A 45.4-tonne (50-ton) cyanide mill began operating in April 1934 with an average rate of 31 tonnes (34.25 tons) per day. A shipment of 500 bags of gold concentrate (up to 27.2 tonnes) was apparently lost through the ice on March 18, 1934 (Winnipeg Free Press, August 22, 1980 and June 22, 1981; The Tribune, July 12, 1980).

During 1935, at the first level there were 41 m (135 ft) of raising and 122 m (399 ft) of diamond drilling and at the second level 121 m (398 ft) of drifting and cross-cutting and 248 m (813 ft) of diamond drilling completed. Surface work consisted of 463 m (1518 ft) of diamond drilling on West Island and in the vicinity of the mine (see Remarks). Some lead and silver were apparently recovered from concentrates shipped to the smelter in 1935 (see Remarks and History of Production).

"In March 1935, the company reported that it had obtained no ore below the first level of the mine and that it had milled all immediately available material. It was the intention of the company to suspend operations in March 1935 but following this decision the company announced that diamond drilling from a crosscut on the first level of the mine would be done as a last resort." (Godard, 1963).

A 5-hole underground drill program was carried out to locate more ore; the results were as follows:

Set Up	Hole No.	Direction	Width	Assay g/t (oz/ton) gold
1	1	+45°/N	1.07 m	104.57 (3.05)
			0.09 m	68.57 (2.00)
			0.52 m	3.43 (0.10)
			0.79 m	1.71 (0.05)
			0.15 m	335.99 (9.8)
	3	0°/N	0.18 m	4.11 (0.12)
			1.22 m	8.57 (0.25)
			2.14 m	7.54 (0.22)
2	1	+45°/N	0.76 m	17.14 (0.5)
	2	+30°/N	1.16 m	6.17 (0.18)

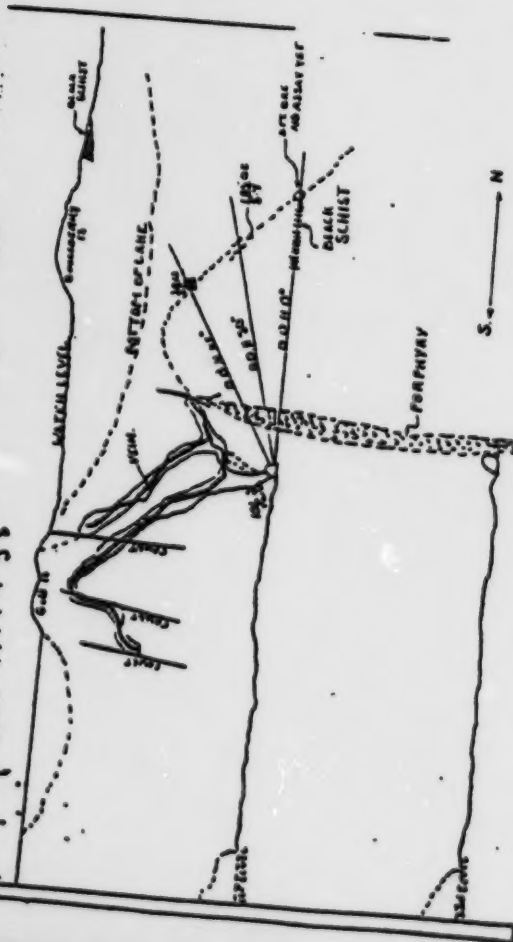
(Source: Manitoba Mines Branch Annual Report 1934-1935, p. 60-61)

"Following diamond drilling early in 1935 to the north of the previous workings, operations were continued for a time on what appeared to be a downward extension of the vein. Results were not conclusive and this together with the financial position of the company resulted in suspension of operations at June 13, 1935." (Godard, 1963).

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Below: Vein as Indicated by Diamond Drilling, 1935:

April 11, 1935



Taken from Northern Miner, April 11, 1935, in Island Lake Mines Limited Corporation File.

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3rd Annual Report Ventures Limited 1931

APPENDIX B

ISLAND LAKE OPTION Island Lake, Manitoba

MEMORANDUM RE SAMPLING OF SURFACE AND DRILL HOLES

SURFACE SAMPLING

Vein No. 1	Width Sampled Feet	Gold Value per Ton
Vein No. 2	1.5	\$12.00
Vein No. 3	5.0	21.60
In places full vein widths not sampled.		
	4.5	26.40
	4.9	46.40
	5.0	18.00
	4.5	0.20
	0.0	22.70
	0.0	7.41
	15.0	25.40
	7.2	11.20
	5.0	5.10
	15.0	15.20
Vein No. 4	6.6	24.35
In places full vein widths not sampled.		
	4.0	22.80
	7.0	11.70

DIAMOND DRILL HOLES

Dr. No.	Dip	From Feet	To Feet	Length Feet	Gold Value per Ton
1	45°	11.2	15.0	3.8	8.40
		15.0	20.0	5.0	2.10
		20.0	24.0	4.0	5.10
		24.0	25.4	1.4	0.40
		25.4	29.7	4.3	48.10
		42.3	45.5	3.2	75.20
		45.5	47.7	2.2	3.00
		47.7	49.3	1.6	7.90
		57.25	60.0	2.75	41.20
		60.0	65.0	5.0	9.00
2	45°	31.0	35.0	4.0	45.40
		35.0	48.0	13.0	2.40
		76.0	81.3	5.3	21.40
		81.3	85.3	4.0	1.60
		85.3	89.0	3.7	Not sampled
		89.0	94.0	5.0	20.00
3	45°	56.7	60.0	3.3	149.00
		60.0	65.0	5.0	22.40
		65.0	68.3	3.3	2.00

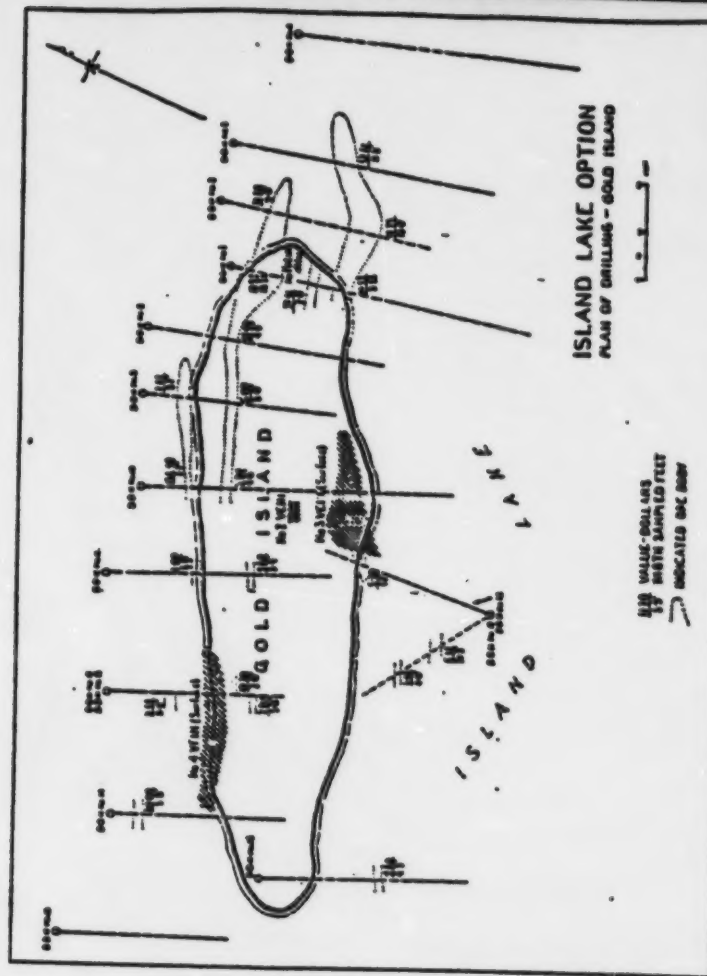
NAME OF PROPERTY JACK OF DIAMONDS (ISLAND LAKE MINE)

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Below: Description of Diamond Drill Holes, 1931-32:

Hole No.	Dip	From Pt.	To Pt.	Length Ft.	Gold Value per Ton	Remarks
4	45°	No core samples.	Sludge not over 40c.	38.55	0.45	31.20
5	60°	No values over 40c.				
6	45°	No values over 40c.				
7	45°	No values over 40c.				
8	45°	46.5	51.0	4.5		32.40
9	45°	19.3	21.5	2.2		6.00
		21.5	26.0	4.5		8.20
		26.0	28.00	2.0		5.20
		49.5	54.5	5.0		6.00
10	45°	10.0	12.5	2.5		1.00
		26.2	27.9	1.7		134.40
11	45°	44.9	49.5	4.6		5.80
		50.0	55.0	5.0		1.00
		80.0	82.4	2.4		9.60
12	45°	71.5	73.5	2.0		10.20
13	60°	45.0	48.1	3.1		6.60
		48.1	52.5	4.4		20.60
		52.5	56.0	3.5		4.20
		66.0	66.5	0.5		18.40
		103.9	104.1	0.2		6.00
		108.7	109.0	0.3		18.00
		114.5	119.5	5.0		2.80
14	60°	21.0	27.6	6.6		80.00
15	60°	No values over 40c.				
16	45°	79.3	81.0	1.7		5.20
17	45°	34.3	35.3	1.0		6.00
		35.3	40.6	5.3		4.40
		59.0	63.0	4.0		1.40
18	45°	65.7	70.0	4.3		9.60
19	45°	96.5	97.3	0.8		29.00
		292.5	293.0	0.5		1.20
		300.0	305.0	5.0		2.80
		349.5	351.0	1.5		2.40

(See also: 5th Annual Report on Mines and Minerals, p. 37).



NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Oliver (1952) visited the property in 1951. The following sample assays were reported:

Sample No.	Au	Ag
	g/t (oz/ton)	g/t (oz/ton)
036	18.51 (0.54)	92.57 (2.70)
037	trace	488.6 (14.25)
038	38.4 (1.12)	67.2 (1.96)
039	trace	Nil

The following restakings have occurred:

Year	Claim Name	Claim Number	Staker
1959	Phil Nos. 1-12	W 31046-57	P. Smerchanski
1960	Phil Nos. 1-12	W 32739-50	"
1961	Phil Nos. 1-12	W 34188-99	"
1963	Hammy Nos. 1-10	W 36349-58	T. Hamilton
	On Hammy Nos. 1, 6 and 7, between 1964 and 1969, 140 m ³ (4960 cu ft) of rock was trenched on Gold Island.		
1970	McKenzie Nos. 1, 2	W 43059, 60	R. McKenzie
1972	CB 5283		C.E. Wass
	-assigned P.D. Holden in 1973.		
	-cancelled in 1974.		

The area was examined by the Manitoba Government in 1976 (Chastko and Gibson, 1976). In 1978 Walter A. Miller staked CB 8486. The claim was held by Wambel Gold Ltd. in 1980. CB 8486 was cancelled in 1981.

In the summer and fall of 1980, a recovery scheme to dredge up 500 bags of gold concentrate that had been lost through the ice in 1934, was started by Don McIvor, Bruce Kondratuk, Wayne Wamboldt and Abraham McPherson (the only person who knew where the concentrate was). Nine tonnes of concentrate were recovered from a depth of 21 m during four months of dredging (Winnipeg Free Press, June 22, 1981). In October 1980, 140 bags of concentrate were flown to Thompson. This shipment was sent to Hudson Bay Mining and Smelting Company, Limited in Flin Flon in November 1981 for processing (Winnipeg Free Press, January 4, 1982).

In 1981, W.B. Dunlop staked the former mine area as CB 13189 (Pet 1) and optioned it to BP Minerals Limited. BP, in joint venture with St. Joe Canada Inc., carried out diamond drilling in 1982, 1983 and 1984. The option was dropped in 1985.

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

HISTORY OF PRODUCTION

Year	Ore milled tonnes (tons)	Grade g/t (oz/ton)	Production kg (oz) gold
1934	6338 (6984)	20.92 (0.61)	133.36 (4287.6)
1935	1483 (1635)		*52.84 (1699)
Total	7821 (8619)		186.2 (5986.6)

*estimate based on bullion and concentrate receipts of \$59 483
(Manitoba Mines Branch, Annual Report, 1935).

According to previous Mineral Inventory card 53E/16 AU 1 (circa 1974): 955 oz gold and 460 oz silver were produced in 1935 from 1483 tonnes (1635 tons) of ore milled. It was also reported that 1898 oz of gold were produced in the first six months of 1935 from an unknown amount and grade of ore (Northern Miner, September 12, 1935 in Island Lake, Corporation File). According to another report dated March 27, 1935 (in Island Lake Mines Limited, Mining Engineering File): in 1935, 1251 tons (1135 tonnes) were milled and 536.7 oz were recovered in bullion, 254.8 oz in concentrate (average recovery was 0.63 oz/ton (21.59 g/t)).

Some lead may have been produced (see Remarks).

REFERENCES

- Chastko, L.C. and Gibson, J.C., 1976, Precious metals exploration; in Manitoba Mines, Resources and Environmental Management; Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 74-75.
- Cole, G.E., 1938 (June), The Mineral Resources of Manitoba; Province of Manitoba, Economic Survey Board, p. 166.
- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch Publication, p. 53.
- Gilbert, H.P., 1984, Island Lake project; in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 120-125.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 38-40.
- Manitoba Mines Branch:
- Annual Report on Mines and Minerals; 4th, p. 10, 46-47; 5th, p. 36-39; 6th, p. 41-43; 7th, p. 59-62; 8th, p. 2, 80.
 - Mining Recording Files; Hammy Nos. 1-10, File Nos. 61810-18; Jack of Diamonds M.C., Nos. 1-5, File Nos. 8272-77; Lucky Shamrock M.C. and No. 1, File Nos. 8305, 06; Billy Boy M.C., Nos. 1-3, File Nos. 8320-22, 26.
 - Corporation Files; Island Lake Mines Limited; Island Lake "concentrate"; Ventures Limited (Third Annual Company Report, 1931).
 - Mining Engineering Files; Island Lake Gold Mines Limited; Island Lake Mines Limited.
 - Non-confidential Assessment Files; File Nos. 91159, 91162, 91550.
 - Unpublished Information Files; 53E/15; 53E/16.

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

REFERENCES cont'd

- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Neale, K.L. and Weber, W., 1981, Island Lake (parts of 53E/15 and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, p. 42.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/16).
- Parsons, C.S., Anderson, A.K., Johnston, J.D., and Jenkins, W.S.; The recovery of gold from the ore of Ventures Limited, Island Lake property, Manitoba; Reports of Investigations 1932; Metallic Ores Section; Report No. 454, p. 144-156; in Investigations in Ore Dressing and Metallurgy, No. 736; Mines Branch, Ottawa, 1934.
- Phillips, K.A., 1978, Minerals of Manitoba, Volume II: Metallic Minerals; Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, MRD Educational Series 78/2, p. 57-58.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Quinn, H.A. and Meinert, R.S., 1959, The Island Lake Series; The Precambrian, v. 32, No. 4, p. 16-25, 34.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-35.
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- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 50.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

H.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
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- #Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Claim Map Series SE 16, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

REMARKS

1. "There has been one recorded production of lead in Manitoba - that from the Island Lake Mine in 1935." (Cole, 1938). Manitoba's lead production that year was 7.8 tonnes (19 179 lbs) (Manitoba Mines Branch, 8th Annual Report). According to D.F. Parrott, concentrate was sent to Tacoma, Washington, U.S.A. to be smelted into "metal, gold & silver" (Island Lake Mines Limited, Mining Engineering File).
2. Two of three holes completed on West Island by Ventures Limited in 1934-35, encountered three sections of ore varying from 7.6-31 cm (3-12 inches) in width and carrying 34.3-102.86 g (1-3 oz) of gold (Island Lake Mines Limited, Mining Engineering File; March 27, 1935 Report by J.M. Cunningham-Dunlop, in Manitoba Mines Branch, Unpublished Information File, 53E/15). McMurphy (1944) noted quartz veins, well mineralized with pyrite and galena, on this island.

NAME OF PROPERTY
Island Lake Mine
(Jack of Diamonds)

N.T.S. AREA 53E/16 SE

FILE NO. 326
REF. AU 1

REMARKS cont'd

3. Gold occurrences were reported 3.7 km SW, 2.5 km WNW and 800 m SW, respectively, of the Island Lake Mine (Newspaper clipping, December 24, 1931 in Island Lake Mines Limited, Corporation File): on the Bellton Group (on which there are two showings, an iron dyke and a blue quartz vein), two samples ran \$16.80 and \$53.20; on the Casl Group, samples from two islands assayed \$164 and \$41.20 gold (see 53E/16 AU 4); on the Sparrow Group, blue quartz and galena showings and a 12 m (40 ft) wide iron dyke were reported.
4. On the larger of two small islands (1.6 km north of the Island Lake Mine), a grab sample of a quartz vein, 20 cm (8 inches) wide and exposed for 9 m (30 ft), returned an assay of \$4.37 gold/ton (McMurphy, 1944).

Comp./Rev.		CC	JR	PA
By Date	12-63	3-74	09-87	05-90

PRODUCT Copper

N.T.S. AREA 53E/16 SE

REF. CU 1

NAME OF PROPERTY

CB 7661

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.

P.O. Box 1480

North Battleford

Saskatchewan

S9A 3W1

OBJECT LOCATED Cu showing

Mining Division Winnipeg

Lat. 53° 46.9'

Long. 94° 06.3'

UNCERTAINTY: 200 m

Sec.

Tp. 55

R. 23 EPM

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian basalt, andesite, volcanic breccia, correlative amphibolitic schist and gneiss (Map 1646A). A 3.7 m (12 ft) thick zone of mineralization consisting of disseminated to semi-massive sulphides that include pyrite, pyrrhotite and chalcopyrite, occurs within a pillowed dacite unit of a felsic volcanic assemblage. A 0.9 m (3 ft) thick section of this mineralized zone averaged 2% Cu and 1.71 g/t (0.05 oz/ton) Au (Non-confidential Assessment File No. 92152). Meta-dacite, meta-rhyodacite and meta-agglomerate, with quartz-carbonate filled fractures and up to 10% pyrite was reported in drill core from this area.

About 500 m north-northeast of this area, a drill hole intersected fine grained rhyolite, with brecciated zones containing pyrrhotite and slight chalcopyrite, and a semi-massive sulphide section that assayed up to 0.68% Zn.

HISTORY EXPLORATION AND DEVELOPMENT

The copper occurrence is exposed on the shoreline at the west end of Loonfoot Point, 1.4 km south of Loonfoot Island, 2 km northeast of the east end of Heart Island in Island Lake, about 280 km southeast of the Hudson Bay railway line.

E. Craig staked Bennett No. 9 (W 559) a few hundred metres east of this area in January 1932, and assigned the claim to Island Lake Mines Limited in August 1932. The claim was cancelled in 1934.

In 1957 an airborne EM survey was done by Canadian Nickel Company Limited under Airborne Permit No. 19 (Non-confidential Assessment File No. 91624).

In 1965 Kerr Addison Mines Limited did an airborne EM/Mag survey under Airborne Permit No. 56, and an EM anomaly was identified (Non-confidential Assessment File Nos. 91652, 91144). That year, C. Ridder staked Sag 28 (W 38960) over the area and Sag 31 (W 38963) over part of the former Bennett 9 claim. Sag 28, 31 were assigned to Kerr Addison Mines Limited in 1966.

Associated minerals or products of value

gold, zinc.

1955 '0'

NAME OF PROPERTY
CB 7661

N.T.S. AREA 53E/16 SE

FILE NO. 1034
REF. CU 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

Ground EM surveys were done in the winter of 1966 to investigate the airborne anomaly (Non-confidential Assessment File No. 91160). About 500 m north-northeast, a hole was drilled northwards to a depth of 35 m (115 ft) on the Sag 31 (W 38963) claim, and a drill core assay of up to 0.68% Zn, 0.03% Cu was reported (Non-confidential Assessment File No. 91402). Sag 28 was cancelled in November 1968. Sag 31 was cancelled in January 1970.

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91, and an anomaly was identified in the area (Non-confidential Assessment File No. 91684).

In 1976, CB 7661 was staked by the Manitoba Government. Mapping, sampling and a reconnaissance VLF EM-16 survey was done that year. A sample (from the south part of the former Sag 28 claim) returned up to 2% Cu and 1.71 g/t (0.05 oz/ton) Au. In 1977, magnetic, VLF EM-16, vertical loop, and horizontal loop EM-17 surveys were carried out. Two holes, totalling 220 m (723 ft), were drilled near the copper occurrence. Another three holes, totalling 248 m (813 ft), were drilled east of the occurrence (on the west part of the former Bennett 9 claim) (Non-confidential Assessment File No. 92152). Drilling results were inconclusive. CB 7661 was cancelled in 1978.

In 1988, Leona 5 (W 52149) was staked by Corona Corporation. The claim was transferred to Cobham River Mines Ltd. in 1990.

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
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- Gale, G.H., Baldwin, D.A. and Koo, J., 1980, A geological evaluation of Precambrian massive sulphide deposit potential in Manitoba; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-1, p. 81-82.
- Gilbert, H.P., 1984, Island Lake project (53E/16 SE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 120-125.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
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- Manitoba Mines Branch:
- a) Unpublished Information Files; 53/16; 53E/9, 10, 15, 16.
 - b) Non-confidential Assessment Files; File Nos. 91144, 91160, 91402, 91624, 91652, 91684, 92152.
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- McMurchy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.

REFERENCES cont'd

- Nielsen, E., 1980, Quaternary geology and gravel resources of the Island Lake - Red Sucker Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Report GR80-3, 24p.
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- Petuk, H.W., 1977, Island Lake (53E/15 SE, 16 SE & SW and 53F/12 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Explorations Operations Branch, Report of Field Activities, 1976, p. 71-73.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
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- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-33.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island Lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-15.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 3553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba boundary, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.

NAME OF PROPERTY
CB 7661

N.T.S. AREA 53E/16 SE

FILE NO. 1034
REF. CU 1

MAP REFERENCES cont'd

Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by R.J. Meinert, Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
#Preliminary Compilation Map, Loonfoot Island - Area 1, (Geology and grid locations), Scale 1:48 000; in Manitoba Mines Branch, Unpublished Information Files (53E/9, 10, 15, 16) (1976).
Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
Map, Island Lake - Red Sucker Lake area (East half), (Quaternary Geology), Scale 1:100 000 - Accompanying Report by Nielsen (1980), Manitoba Mineral Resources Division.
Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
*Claim Map Series SE 16, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

A drill core assay of 0.15% Zn was reported from an island east of Bluff Island, on the former Sag 162 claim (Non-confidential Assessment File Nos. 91402, 91652). Also near this area, 0.3-0.9 cm (1/8-3/8 inch) thick asbestos veins were reported in a drill core section at a depth of 159-189 m (522-620 ft), on the Rita 25 claim (Non-confidential Assessment File No. 92288). Up to 14 000 ppm Cr was reported 2.4 km east of Bluff Island (occurrence #11, Theyer, 1985, p. 5).

Comp./Rev.	PA
By Date	07-90

PRODUCT Gold

N.T.S. AREA 53E/16 SE, SW

REF. AU 4

NAME OF PROPERTY

Casl Group

OWNER OR OPERATOR AND ADDRESS

1990-BP Minerals Limited
Suite 1700
55 University Ave
Toronto, Ontario
M5J 2H7

OBJECT LOCATED Island on Casl (W 294)

Mining Division Winnipeg

Lat. 53° 47.33'

Long. 94° 14.6'

UNCERTAINTY: 1000 m

Sec.

Tp. 55

R. 22 EPM

DESCRIPTION OF DEPOSIT

According to a newspaper clipping (December 24, 1931): "On the Casl a grab sample from the shore of a 700-ft (213 m) island assayed \$164 and on a smaller island to the west an assay of \$41.20 gold was had from a quartz-pyrite showing." (Manitoba Mines Branch, Corporation File, Island Lake Mines Limited).

Precambrian Hayes River Group metasedimentary rocks were mapped in the area: feldspathic greywacke, siltstone; argillite, argillaceous siltstone, minor argillaceous wacke, related schist and slate; carbonate and iron formation (Preliminary Map 1985 I-3).

HISTORY OF EXPLORATION AND DEVELOPMENT

The island is located approximately 2.5 km west-northwest of the Island Lake Mine (53E/16 AU 1), 1.3 km southeast of East Savage Island in Island Lake, about 270 km southeast of the Hudson Bay railway line. The newspaper article is probably referring to islands on Casl and Casl No. 4.

The history of staking is as follows:

Year	Claim	Staker
1931	Casl (W 294), Casl No. 1, 4 (W 295, 297) - 48% interest assigned to Ernest W. Middleton, 52% to Theo A. Sparks.	G. R. Sparks
	Casl No. 2, 3 (W 289, 290) - 52% assigned to Theo. A. Sparks.	Ernest W. Middleton.

Ernest W. Middleton assigned 32% of his interest in the claims to Adam S. Bellingham who transferred 16% to Herbert S. Cowen. Herbert S. Cowen transferred his 16% to Thomas A. Beckett. Finally, the owners (16% E.W. Middleton, 16% A.S. Bellingham, 16% T.A. Beckett) transferred all interest in the Casl claims to Theo. A. Sparks in December of that year.

Associated minerals or products of value
lead.

NAME OF PROPERTY

Casl Group

N.T.S. AREA 53E/16 SE, SW**FILE NO.** 1033**REF.** AU 4**HISTORY OF EXPLORATION AND DEVELOPMENT** cont'd

The claims were optioned to Kenneth A. MacPhadyen in December 1931. In October 1932, the Casl claims were grouped and the estate of K.A. MacPhadyen abandoned its option. Work was reported later that year.

In 1933, Angus Mc Donald staked Casl No. 5-7 (W 2017-2019) for Theo. A. Sparks and Casl No. 8 (W 2020) for G.K. Burrows. In December 1933, Theo. A. Sparks acquired Casl 8 and assigned 1/4 interest each in the Casl group of claims to Adam S. Bellingham and Ernest W. Middleton. The claims were surveyed in 1934 and work was reported in July of that year. In May 1935, Casl 1-8 were grouped and work was reported in May and July 1935. Casl, Casl 1-4 were cancelled in February 1936; Casl 5-8 were cancelled in October 1936.

The area was restaked as J.D. 1-9 (W 12578-86) and part of T.J. 2 (W 12599) by John Drewe in 1944. In August 1945, the claims were assigned to John Drybrough. In 1946, Vulcan Syndicate drilled three holes, totalling 658 m, on the former Casl 2 claim and one hole on T.J. 2 (Non-confidential Assessment File No. 91159). Some of the results were as follows:

<u>Claim</u>	<u>DDH No.</u>	<u>Drilled Depth</u>	<u>Remarks</u>
J.D. 2	1	229 m (751 ft)	Up to 0.01 (oz/ton Au?) at 116 m (380 ft) and 130 m (427 ft) depth. Trace galena in quartz-feldspar porphyry at depth of 174 m (569.2 ft).
	S-2	200 m (657 ft)	0.03 (oz/ton Au?) over 1 m (3.5 ft); trace galena in black slaty schist at 119 m (391.8 ft) depth.
J.D. 5	S-3	228 m (750 ft)	0.10 (oz/ton Au?) over 1 m (3.4 ft) at 196 m (643 ft) depth; some fuchsite at 216 m (710.5 ft).
T.J. 2	S-4	235 m (770 ft)	Metagabbro with disseminated pyrite, pyrrhotite, chalcopryite from 42-72 m (138-236 ft); iron formation at 98 m (321 ft).

J.D. 6, 9 were cancelled in 1947; J.D. 3, 4, 7 in 1948; the rest were cancelled in October 1950.

The following claims were staked over the property:

<u>Year</u>	<u>Claim Name</u>	<u>Claim Number</u>	<u>Staker</u>
1973	Reservation of Mineral Rights	R.M.R. No. 141	P. Holden
	-cancelled 1976.		
1980	Bel 1, 2	CB 11733, 34	Walter A. Miller (assisted by G. Cattz and R. Shultz) for Wambel Gold Limited.
	-cancelled 1982.		
1982-83	Zapa 2, 3 Game 17, 18	CB 13005, 6 W 48869, 70	BP Minerals Limited

NAME OF PROPERTY

Casl Group

N.T.S. AREA 53E/16 SE, SW

FILE NO. 1033

REF. AU 4

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
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- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
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- Manitoba Mines Branch:
- a) Unpublished Information Files; 53/16.
 - b) Non-confidential Assessment Files; File Nos. 91159, 91624, 91684.
 - c) Mining Recording Files; File No. 30469-77, 90 (J.D. 1-9, T.J. 2); Nos. 8327-28, 32-33, 35 (Casl No. 2, 3, Casl, Casl No. 1, 4); Nos. 15173-76 (Casl No. 5-8).
 - d) Corporation Files; Island Lake Mines Limited.
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Neale, K.L. and Weber, W., 1981, Island Lake (parts of 53E/15 and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, p. 38-42.
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- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.
- 1957 '0'

NAME OF PROPERTY
Casl Group

N.T.S. AREA 53E/16 SE, SW

FILE NO. 1033
REF. AU 4

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.
- Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by R.J. Meinert, Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
- Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Preliminary Map 1985 I-4, Meegeesiwaseeson Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- *Claim Map Series SE 16, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.
- #Claim Map Series SE 16, SW 16, 53E, Scale 1:31 680, circa 1934, Mining Recording, Manitoba Mines Branch.

Comp./Rev. PA
By Date 07-90

PRODUCT Silver

H.T.S. AREA 53E/16 SE

EXP. AG 1

NAME OF PROPERTY
Loonfoot IslandOWNER OR OPERATOR AND ADDRESS
1990-BP Minerals Limited
Suite 1700
55 University Ave
Toronto, Ontario
M5J 2H7

OBJECT LOCATED Pb-Zn-Ag-Cu showing

Mining Division Winnipeg

Lat. 53° 47.82'

Long. 94° 08.1'

UNCERTAINTY: 250 m

Sec.

Tp. 55

R. 23 EPM

DESCRIPTION OF DEPOSIT

"The mineralization is disseminated galena and sphalerite within an altered intermediate volcanic rock (Precambrian), and occurring close to the contact with Island Lake Series sediments.....A grab sample from the occurrence assayed 0.27% Zn, 0.23% Pb and 0.72 oz/ton (24.7 g/t) Ag." (Non-confidential Assessment File No. 92152).

HISTORY OF EXPLORATION AND DEVELOPMENT

The occurrence is exposed on the southeastern shoreline of the hook-like projection on the west side of Loonfoot Island. It is 2.6 km north of the east end of Heart Island, and 4.8 km south of Whiteway Island in Island Lake, about 280 km southeast of the Hudson Bay railway line.

In January 1932, the area was staked as Loonfoot No. 1 (W 438) by C. Mews. The claim was assigned to Island Lake Mines Limited in August 1932. It was cancelled in February 1934.

In 1957 an airborne EM survey was done by Canadian Nickel Company Limited under Airborne Permit No. 19 (Non-confidential Assessment File No. 91624).

In 1965 Kerr Addison Mines Limited did an airborne EM/Mag survey under Airborne Permit No. 56 (Non-confidential Assessment File Nos. 91144, 91652).

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684).

CB 7658 was staked by the Manitoba Government in 1976. Mapping, sampling and prospecting was done that year, and a Pb-Zn-Ag occurrence was found. In 1977, a VLF EM-16 survey was done. An area 425 m to the north, was investigated with vertical loop and magnetic surveys and one drill hole (Non-confidential Assessment File No. 92152). CB 7658 was cancelled in 1978.

In 1981, Can 7 (W 46588) was staked by BP Minerals Limited.

Associated minerals or products of value
lead, zinc.

NAME OF PROPERTY
Loonfoot Island

N.T.S. AREA 53E/16 SE

FILE NO. 1032
REF. AG 1

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P., 1984, Island Lake project (53E/16 SE); in Manitoba Energy and Mines, Mineral Resources, Report of Field Activities, 1984, p. 120-125.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area (53E/13 NE and NW; 53E/16 SE and SW; 63H/16 NE), in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-199.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
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- Manitoba Mines Branch:
- a) Unpublished Information Files; 53/16; 53E/9, 10, 15, 16; 53E/general.
 - b) Non-confidential Assessment Files; File Nos. 91144, 91624, 91652, 91684, 92152.
 - c) Mining Recording Files; File No. 13214 (Loonfoot No. 1).
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Oliver, T.A., 1952, Island Lake area (field notes and report); in Manitoba Mines Branch, Unpublished Information Files (53E/16).
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- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-15.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

NAME OF PROPERTY
Loonfoot Island

N.T.S. AREA 53E/16 SE

FILE NO. 1032
REF. AG 1

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.
- Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by R.J. Meinert, Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
- Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- #Preliminary Compilation Map, Loonfoot Island - Area 1, (Geology and grid locations), Scale 1:48 000; in Manitoba Mines Branch, Unpublished Information Files (53E/9, 10, 15, 16) (1976).
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- *Claim Map Series SE 16, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

1. About 900 m northeast, on CB 7659, sulphide mineralization was traced over 91 m (300 ft) of strike within a contact zone (up to 7.6 m thick) between quartz diorite and volcanics: up to 1.10% As, 0.11% Zn, 20.6 g/t (0.6 oz/ton) Ag, 1.03 g/t (0.03 oz/ton) Au was reported in sample assays (Non-confidential Assessment File No. 92152; Petak, 1977). A grab sample 250 m southwest of this Au-Ag-Zn occurrence returned 0.15% Mo.
2. On Preliminary Compilation Map, Loonfoot Island (in Unpublished Information Files, Manitoba Mines Branch): a Pb occurrence is noted 400 m southeast; a chalcopyrite occurrence is noted 500 m west; a copper occurrence is noted 4.2 km northeast.

Comp./Rev. PA
By Date 07-90

PRODUCT	Lead	N.T.S. AREA 53E/16 SW	REF. PB 1
NAME OF PROPERTY	OWNER OR OPERATOR AND ADDRESS		
CB 2811	1990-Open		
OBJECT LOCATED	Sample C-22	Mining Division Winnipeg	
Lat.	53° 51.9'	Long.	94° 21.14'
		UNCERTAINTY: 500 m	
Sec.		TP. 56	R. 21 EPM

DESCRIPTION OF DEPOSIT

A sample, assaying 1.14% Pb, was taken from a belt of Precambrian metasedimentary and metavolcanic rocks that may separate the Bella Lake and the Krolman Lake granites. "The belt is 3/4 mi (1.2 km) wide at this point and a major fault lies along its centre" (Non-confidential Assessment File No. 92234). Drill holes intersected andesite (with quartz and quartz-carbonate veinlets), tuff, and graphitic argillite, with minor pyrite, pyrrhotite and chalcopyrite, and quartz-feldspar porphyry with minor pyrite. Sphalerite was reported in drill core sections of chlorite-talc schist and andesite/dacite (Non-confidential Assessment File No. 92234).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located 900 m north of Pickerel Narrows, 7 km southeast of Irving Lake, and 6.2 km northwest of Harper Island in Island Lake, which is approximately 225 km southeast of the Hudson Bay railway line.

In 1957 an airborne EM survey was done by Canadian Nickel Company Limited under Airborne Permit No. 19 (Non-confidential Assessment File No. 91624).

In 1969, Magenta Explorations Limited did some reconnaissance geochemical sampling in the area. Lake sediment sampling in the Pickerel Narrows area indicated an anomalous geochemical value of 600 ppm Cu (Non-confidential Assessment File No. 91786). In the following year, CB 2811 was staked by Gerry Trepanier. A few months later, he assigned 1/3 interest to Barringer Research Limited and 2/3 interest to Omar Explorations Inc.. During this time, Magenta Explorations Limited took out Exploration Reservation No. 90. An airborne EM survey was done by Sherritt Gordon Mines, Limited in 1970 under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684).

Associated minerals or products of value

Zinc, silver, copper, lead.

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In the summer of 1970, Barringer Research Limited carried out regional geological mapping, prospecting, and geochemical sampling. Samples were analyzed for HCL acid extractable Cu, Zn, Ni and total Mo. A grab sample (C-22) of volcanic rock returned 1.14% Pb, 1.03 g/t (0.03 oz/ton) Ag, 0.05% Zn, 0.02% Cu, and less than 0.01% Mo. About 650 m southeast, a grab sample (C-23) from the granite metasediment contact returned 0.04% Pb, 1.71 g/t (0.05 oz/ton) Ag, 0.01% Zn, 0.01% Cu, and less than 0.01% Mo. A grab sample (#4151) of andesite, 1 km southeast, returned trace Au, 0.69 g/t (0.02 oz/ton) Ag, 0.03% Cu (Non-confidential Assessment File No. 91786). Stream sediment sampling was done west and southwest of this area (one sample, 1.65 km northwest, gave a geochemical value of 150 ppm Cu).

In October 1970, a reconnaissance airborne survey was done, followed by a more detailed helicopter EM, Mag and radiophase survey (Non-confidential Assessment File No. 92234). In January 1971, magnetic, horizontal-loop electromagnetic, gravity and elevation surveys were done to examine some HLEM anomalies: three main conductors that also correlate with soil sampling results, were outlined in the area (Non-confidential Assessment File Nos. 92234, 35). Sopuck and Moss (1972) reported that "values in total copper as high as 2000 ppm are found in the south part of the grid within 500 ft (152 m) of a conductive horizon" (Non-confidential Assessment File No. 92234).

In early 1972, all interest in CB 2811 was assigned to Magenta Explorations Limited. Four holes, totalling 247 m (809.8 ft), were drilled and detailed geological mapping was done by Barringer Research Limited for Magenta Explorations Limited that year (Non-confidential Assessment File No. 92234, 35). Pyrite, pyrrhotite, chalcopyrite and sphalerite were reported to occur in drill core from 68 m-deep drill hole I.L.W. 4 (Non-confidential Assessment File No. 92234). In August 1972, airborne Input EM/Mag surveys were done by Questor Surveys Limited for Magenta Explorations Limited (Non-confidential Assessment File No. 91786).

Exploration Reservation No. 90 was cancelled in 1973.

CB 2811 was cancelled in December 1979.

REFERENCES

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- Gilbert, H.P. and Weber, W., 1983, Island Lake project (parts of 53E/15, and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1983, p. 63-69.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.

NAME OF PROPERTY
CB 2811

N.T.S. AREA 53E/16 SW

FILE NO. 1035
REF. PB 1

REFERENCES cont'd

- Herd, R.K. and Ermanovics, I.F. (with contributions from G. Delaney and W. Fyson), 1976, Geology of Island Lake map area (53E), Manitoba and Ontario; Geological Survey of Canada, Paper 76-1A, p. 393-398.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91624, 91684, 91786, 92234, 92235.
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Moss, R.D., 1970, General report of the geology and prospecting in the Irving Lake area, Manitoba for the RDP Canadian Joint Venture by Barringer Research Limited; in Manitoba Mines Branch, Non-confidential Assessment File No. 91786.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Sopuck, V.J. and Moss, R.D., 1972, Report on the geological environment of CB 2811, Pickeral Narrows, Manitoba for Magenta Explorations Limited; in Manitoba Mines Branch, Non-confidential Assessment File No. 92234.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island Lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
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- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
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- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E, Island Lake, (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.

NAME OF PROPERTY
CB 2811

N.T.S. AREA 53E/16 SW

FILE NO. 1035
REF. PB 1

MAP REFERENCES cont'd

- Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- #Map Dwg.9-470/B-3R, Irving Lake area, (Assay sample locations), Scale 1:63360; in Non-confidential Assessment File No. 91786, Manitoba Mines Branch (1970).
- Map Dwg.9-470/B5-2B, Irving Lake area, (Geology), Scale 1:15 840; in Non-confidential Assessment File No. 92235, Manitoba Mines Branch (1972).
- Map ER79-1-5, Island Lake (53E) - Opasquia Lake (Geology), Scale 1:250 000 - Accompanying Report by Gale et al. (1980), Manitoba Mineral Resources Division.
- Map ER79-2-1, Superior Province, northern segment (Index Map also showing outline of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 I-4, Meegeesiwaseeson Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map, Island Lake, Manitoba-Ontario, (Geology), Scale 1:250 000, by K.L. Currie, GSC Open File 1120, Geological Survey of Canada (1984).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- *Claim Map Series SW 16, 53E, Scale 1:31 680, circa 1989, Mining Recording, Manitoba Mines Branch.

REMARKS

A grab sample (C-27), 3.95 km northwest, returned up to 3.09 g/t (0.09 oz/ton) Ag (Non-confidential Assessment File No. 91786).

Comp./Rev.	PA
By Date	07-90

PRODUCT Nickel

N.T.S. AREA 53E/16 SE

REF. NI 1

NAME OF PROPERTY:

Jan Group

OWNER OR OPERATOR AND ADDRESS

1990 - Open

OBJECT LOCATED: Locality 4 (Map 59-3B)

MINING DIVISION Winnipeg

Lat. 53° 50'

Long. 94° 6.7'

UNCERTAINTY: 500 m

Sec.

Tp. 56

R. 23 EPM

DESCRIPTION OF DEPOSIT

The deposit is situated in Precambrian volcanic rocks of the Hayes River Group, within a peridotite sill. "The principal metallic mineral is pyrite. Irregularly distributed in certain areas of the pyrite are small grains of chalcopyrite and millerite (NiS-64.7% Ni)" (Quinn and Meinert, 1959). Godard (1963) described the deposit as "Locality No. 4". Cobalt was noted in an assay by Quinn (1960).

According to Theyer (1977), an ultramafic body "outcrops on a small reef....displaying talcose light green to dark grey serpentinite cut extensively by carbonate veins (up to 5 cm thick), and containing up to 10% disseminated sulphide. The main minerals observed, besides magnetite, were (in order of decreasing amount): pyrite, pyrrhotite, chalcopyrite and rare exsolutions of pentlandite, derived from pyrrhotite". "Petrographic examinations reveal a dense olivine cumulate with individual subhedral olivine (up to 5 mm) embedded in magnetite and chromite" (Theyer, 1985, p. 6).

HISTORY OF EXPLORATION AND DEVELOPMENT

There are 104 claims in the Jan Group which is located on Island Lake, north of Loonfoot Island. The group, which covers an 11 km by 0.8 km (7 mi x 0.5 mi) area and is orientated northeast-southwest, lies about 265 km (165 mi) southeast of the Hudson Bay railway line.

The Manitou 1, 2 (206834, 833) claims were first staked in the area around 1928 (Mining Claim Map).

In 1958, the area was staked as Jan Nos. 1-104 (W 29272-375) by V. Goodman, N. MacAskill, J.I. Church, T. Linklater, W. Rheall, and H.S. Fraser. The claims were assigned to Canadian Nickel Company Limited that year. An aeromag survey was completed by this company on the claims in 1958. The survey indicated a magnetic 'high' here. "A medium to high intensity anomaly has been traced from claim 29277 (Jan No. 6).....to claim 29353 (Jan No. 82) (approximately 5.5 mi (8.8 km)). The anomaly varies from 300 to 1500 ft (91 to 457 m) in width and is probably caused by peridotite with disseminated magnetite.....(On the east end of the group) several medium intensity anomalies are located. These may be caused by narrow bands of peridotite or

Associated minerals or products of value

cobalt, copper, chromite, magnesium.

1878 '0'

- 1 -

ODUCT NICKEL

PROVINCE OR
TERRITORY

Manitoba

328

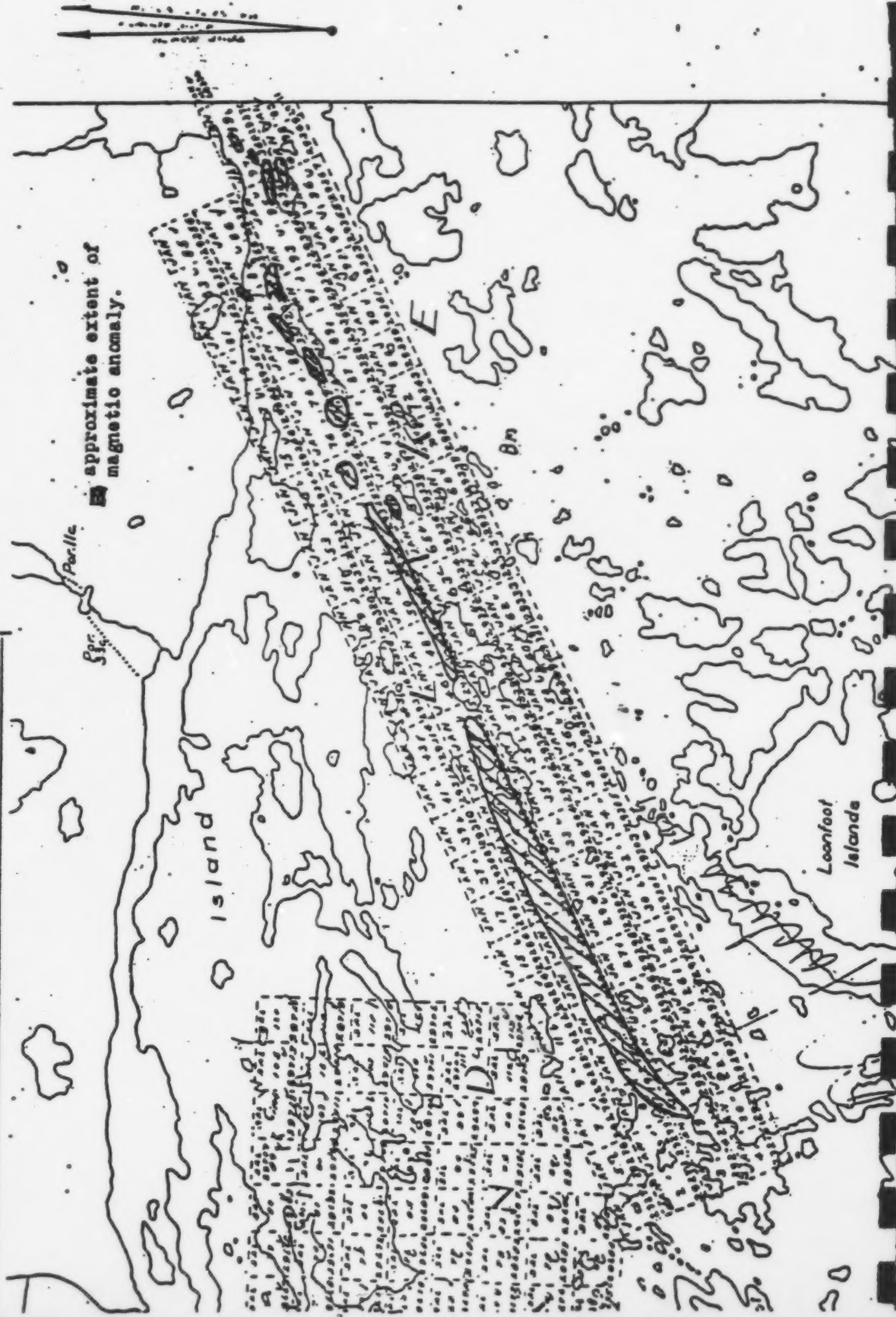
N.T.S. AREA 53 E/16

SE

REF. NI 1

ME OF PROPERTY

JAN GROUP



NAME OF PROPERTY

Jan Group

N.T.S. AREA 53E/16 SE

FILE NO. 328

REF. NI 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

possibly magnetic sulphides" (Non-confidential Assessment File No. 91158). "A selected sample of the peridotite taken for assay contained 0.72% nickel and 0.02% cobalt" (Quinn, 1960). This sample was taken from an area near the boundary of the Jan 38 and 40 claims. Diamond drilling was reported by Godard (1963, p.42) to have been done in 1957 to test the anomaly, but nothing was reported and the claims lapsed in 1960. In 1965 Kerr Addison Mines Limited did an airborne EM/Mag survey under Airborne Permit No. 56 (Non-confidential Assessment File No. 91652).

The area was restaked as the Pan Group (W 43221-226; 43209-220; 43089-119; 43623-626) of 53 claims by B. McEachen, J. Hinzer and R. Henning in 1970. It was assigned that year to Cominco Ltd. An airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 in 1970 (Non-confidential Assessment File No. 91684). An HLEM (EM-17) survey was done over the Pan 1-10, 44-49 claims in 1971 (Non-confidential Assessment File No. 92827). Magnetic and electromagnetic (VLF EM-16) geophysical surveys were done on the Pan group of claims by Cominco in 1972 (Non-confidential Assessment File No. 92324).

In 1972, Cominco Ltd. drilled 4 holes totalling 520 m (1705 ft) on the Pan 1, 2, 48 (former Jan 38, 18, 16) claims. The best assays reported were 1 m (4 ft) of 0.78% Ni, 0.05% Cu at a depth of 8 m (27 ft) for DDH P-3 on the Pan 1 claim. DDH P-4, also on Pan 1, had nickel assays ranging from 0.14 to 0.91% (Non-confidential Assessment File No. 92233). In 1974, Cominco Ltd. drilled 4 holes totalling 664 m (2180 ft) on the Pan 1, 4 claims (former Jan 38 area) and 2 holes totalling 290 m (950 ft) on Pan 2 (former Jan 18 claim) (Non-confidential Assessment File No. 92288). Results are summarized as follows:

<u>Claim</u>	<u>DDH No.</u>	<u>Hole Depth</u>	<u>Maximum assays/Remarks</u>
Pan 1	Pan 6	36 m	1.42% Ni, 0.28% Cu Ultramafic rock with disseminated and patchy sulphides (pentlandite and possibly millerite) at 6-24 m depth
	Pan 7	225 m	2650 ppm Ni, 35.74% MgO
	Pan 8	155 m	1.41% Ni, 0.07% Cu Ultramafic rock with disseminated and patchy sulphides (pyrrhotite, pentlandite), magnetite at 17-87 m depth; with 35% MgO at 88-139 m depth.
Pan 4	Pan 5	249 m	1.32% Ni, 2.48% Cu Ultramafic rock intersected at 57-151 m contains more than 35% MgO
Pan 2	Pan 9	135 m	2400 ppm Ni Ultramafic rock from 31-127 m with fine veins of asbestos, magnetite veins and seams, and disseminated and patchy sulphides.
	Pan 10	155 m	assay results not reported; much magnetite was intersected in this hole

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

The Pan group of claims were cancelled as follows:

1973 Pan 35 (W 43105).
1974 Pan 50-53 (W 43623-26)
1976 Pan 28 (W 43098), Pan 32 (W 43102), Pan 36-43 (W 43106-11, 18, 17)
1977 Pan 10-18 (W 43212-20), Pan 19-27 (W 43089-97), Pan 29-31
(W 43099-101), Pan 33-34 (W 43103-4)
1978 Pan 4-5 (W 43224, 26), Pan 7-9 (W 43209-11), Pan 45 (W 43119)
1979 Pan 1-3 (W 43221-23), Pan 6 (W 43225), Pan 44 (W 43116), Pan 46-49
(W 43114, 115, 112, 113).

A base metal exploration program was carried out in the region by the Manitoba Government in 1976 (Petak, 1976; see Preliminary Map, Unpublished Information Files). A pyrite occurrence was noted on an island just east of the former Jan 1, on Jan 5 (Preliminary Map, Unpublished Information Files). Some of the islands in this area were sampled by Delaney (1976) and by Fedikow and Josse (1977), but results were not reported.

In 1981, P. Dunlop staked the Pet group of claims (Pet 7-12, W 46656-60, 62) over most of the old Pan claims (including the locality 4 area). Also that year, BP Minerals Limited staked Loon 1 (CB 13002), Loon 2 (CB 13003) and Can 5 (W 46586) over 581 ha in the Norrie Island area. These three claims covered the old Pan 36-45, 47, 49 claims (parts of the former Jan 1-10, 12, 14, 19-32 claims).

Gilbert (1984) mapped parts of the area and found extensive carbonatization in the Norrie Island area (see also Theyer, 1985, p. 6). According to Gilbert (1985), "Conglomerate....1 km east-northeast of Norrie Island contains pyrite in a 1 m wide rusty zone". Ultramafic rocks were sampled by Theyer (1985, p. 26, 28).

In 1985, the Pet claims were cancelled. The claims in the Norrie Island area are still held by BP Minerals Limited.

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Delaney, G.D., 1976, A reconnaissance study of the metamorphic petrology and volcanic geochemistry of a portion of the Island Lake greenstone belt, Manitoba; Brock University, M.Sc. Thesis, 100p.
Fedikow, M. and Josse, G., 1977, Field notes: Island Lake; Manitoba Energy and Mines, Geological Services Branch (Unpublished Information Files).
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Gilbert, H.P., 1984, Island Lake project (53E/16 SE); in Manitoba Energy and Mines, Mineral resources, Report of Field Activities, 1984, p. 120-125.

NAME OF PROPERTY
Jan Group

N.T.S. AREA 53E/16 SE

FILE NO. 328
REF. NI 1

REFERENCES cont'd

- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area (53E/13 NE and NW; 53E/16 SE and SW; 63H/16 NE), in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-199.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 42.
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- a) Unpublished Information Files; 53E/9,10,15,16; 53E/16.
 - b) Non-confidential Assessment Files; File No. 91158, 92233, 92288, 92324, 92827
 - c) Mining Recording Files; File Nos. 68980-69005 (Pan Nos. 1-53).
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Petak, H.W., 1976, Island Lake (53E/15 SE, 16 SE & SW and 53F/12 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 71-73.
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- Quinn, H.A., and Meinert, R.S., 1959, The Island Lake Series; The Precambrian, v. 32, No. 4, p. 16-25
- Theyer, P., 1977, Evaluation of nickel environments; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1977, Report MEA-4, p. 116-121.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 6-16, 51, 60.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 75.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

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- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).

NAME OF PROPERTY
Jan Group

N.T.S. AREA 53E/16 SE

FILE NO. 328
REF. NI 1

MAP REFERENCES cont'd

- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by R.J. Meinert, Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- #Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map, Island Lake, (Geology and sample locations), Scale 1:126 720 - Accompanying Thesis by Delaney (1975), Brock University.
- Preliminary Compilation Map, Loonfoot Island - Area 1, (Geology), Scale 1:16 000, Unpublished Information Files (53E/9,10,15,16), Manitoba Mines Branch (1976).
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map, Figure 6: Geology of the Sandy Bar Narrows and Loonfoot Island area, (Geology and sample locations), Scale 1:38 462 - Accompanying Paper by Theyer (1985), Manitoba Energy and Mines.
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series SE 16, 53E, Scale 1:31 680, circa 1958, Mining Recording, Manitoba Mines Branch.

Comp./Rev.		CC	PA
By Date	12-63	02-74	05-90

PRODUCT Nickel

N.T.S. AREA 53E/16 SW

REF. NI 2

NAME OF PROPERTY:

Ni Group

OWNER OR OPERATOR AND ADDRESS

1990 -

Midway Lake Minerals Corp. (20% interest)

1624 - 555 St. Mary Avenue

Winnipeg, Manitoba

R3C 3X4

Wydmar Development Corporation (20% int)

Wydmar Resource Enterprises Ltd. (30% int)

Bighorn Development Corporation (30% int)

400-255 17th Ave S.W.

Calgary, Alberta

T2S 2T8

OBJECT LOCATED: Ni showing on Map 26-1960

MINING DIVISION Winnipeg

Lat. 53° 45.94'

Long. 94° 27.8'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 21 EPM

DESCRIPTION OF DEPOSIT

The deposit is situated in Precambrian volcanic rocks (volcanic breccia, agglomerate, tuff, tuffaceous sediments) of the Hayes River Group. The deposit is sulphide (pyrite, pyrrhotite, chalcopyrite) mineralization mostly in a hornblende schist which has a (drill) thickness of 9 to 13 m (30 - 40 ft). This is shown in holes 2 and 3 which were drilled 9 to 13 m (30 - 40 ft) north of the showing (Non-confidential Assessment File No. 91156).

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is situated on an island 0.8 km north of the northwest end of Grand Island in Island Lake, about 265 km southeast of the Hudson Bay railway line.

It was originally staked as Luck Nos. 5, 6 (W 5813, 4) by A.E. Storey for N. Lundahl in 1935. The claims were cancelled in 1936.

In 1957, Canadian Nickel Company Limited did an airborne EM survey (Non-confidential Assessment File No. 91624). In 1958, C.E. Wass staked Ni Nos. 1, 2 (W 30439, 40). Between 1959 and 1965, 127 m³ (4492 cu ft) of trenching, blasting, pitting and stripping was done on Ni Nos. 1 and 2. Phelps Dodge Corporation of Canada, Limited, held an option on the property beginning in 1960, and completed a 7 hole, 197 m (647 ft), diamond drill program on the property that year (Non-confidential Assessment File No. 91156). The drilling indicated the presence of an ultramafic lens (Theyer, 1979).

Associated minerals or products of value
copper, cobalt.

NAME OF PROPERTY
Ni Group

N.T.S. AREA 53E/16 SW

FILE NO. 329
REF. NI 2

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684). The deposit was restaked in 1970 by R. McKenzie as Neil Nos. 2, 3 (W 42966, 7). Work was reported on the claims in 1972 and 1973. On Neil No. 2, 46 m³ (1643 cu ft) of trenching was done. The claims were cancelled in 1974.

Canadian Occidental Petroleum Ltd. staked CB 6541 covering 83.6 ha in 1974. That year, Barringer Research Limited carried out a combined electromagnetic (HLEM) and magnetic survey for Canadian Occidental (Non-confidential Assessment File No. 92244). The claim block was cancelled in 1978.

In 1981, CB 13165 (Rim 1), area 259 ha, was staked by Ralph Birch. The claim was cancelled in 1983.

In January 1984, Jim 2 (W 48250), area 196 ha, was staked by Allen R. McKenzie for Rod McKenzie. The claim was transferred to Midway Lake Minerals Corp. a few months later. Wydmar Resource Enterprises Ltd. and Bighorn Development Corporation each received a 20% interest in the claim in 1986, and another 10% interest in 1987. Wydmar Development Corporation was granted a 20% interest in the claim in 1988. In March 1990, a writ of seizure and sale was recorded against the 30% interest held by Wydmar Resource Enterprises Ltd..

REFERENCES

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- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area (53E/13 NE and NW; 53E/16 SE and SW; 63H/16 NE), in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-196.
- Gilbert, H.P. and Weber, W., 1983, Island Lake project (parts of 53E/15, and 16); in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1983, p. 63-69.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 91156, 92244, (92318).
 - b) Mining Recording Files; File Nos. 52461, 2 (Nickel Nos. 1-2); Nos. 68478, 79 (Neil Nos. 2, 3).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Theyer, P., 1979, Ultramafic occurrences and stratigraphic relationships in the Island Lake and Bigstone Lake areas (53E/10, 11, 12, 15, 16); in Manitoba Mines, Natural Resources and Environment, Mineral Resources Division, Report of Field Activities, 1979, p. 38-39.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, p. 13, 50.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

NAME OF PROPERTY

Ni Group

N.T.S. AREA 53E/16 SW

FILE NO. 329

RKF. NI 2

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- #Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- *Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Preliminary Map 1985 I-4, Meegeesiwaseeson Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Claim Map Series SW 16, 53E, Scale 1:31 680, circa 1960, Mining Recording, Manitoba Mines Branch.

REMARKS

Map 26-1960 indicates a nickel-copper-cobalt showing (53E/16 PYR 1) and a nickel showing north and northeast, respectively, of Grand Island.

Preliminary Map 1985 I-4 indicates two malachite-chalcopyrite showings and four iron formations on Bouchard Island, located west of the former Ni 1, 2 claims.

Comp./Rev.	CC	PA
By Date	02-74	05-90

PRODUCT GOLD

N.T.S. AREA 53E/16 SE

REF. AU 2

NAME OF PROPERTY

Heart Island
(IXL Group)

OWNER OR OPERATOR AND ADDRESS

1990-BP Minerals Limited
Suite 1700
55 University Ave.
Toronto, Ontario

OBJECT LOCATED Au occurrence

Mining Division Winnipeg

Lat. 53° 46.25'

Long. 94° 09.75'

UNCERTAINTY: 300 m

Sec.

Tp. 55

R. 22 EPM

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Hayes River Group andesite and dacite flows. An easterly-trending shear zone and "schist zone" within the volcanic rocks contains abundant quartz and quartz-carbonate stringers and veinlets with pyrite (Godard, 1963).

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on Heart Island.

Following is a chronological list of the claim history of the property:

- 1932-1937 Dell claims and Ace of Hearts group of claims staked over the property. Island Lake Mines Limited examined the Ace of Hearts Group but decided to drop most of the claims (Tribune, November 2, 1933).
- 1937-1939 Neptune claims staked over the property by Roy T. Pickard
- 1944-1954 I.X.L. claims (owner: J.G. Reahil) and Neptune claims staked over the property. Wekusko Consolidated Limited took an option on the property in 1944-1945: a 6 hole, 946 m (3103 ft), drill program was carried out; results were not encouraging and the option was dropped (Wekusko Consolidated Limited, 2nd Annual Report, December 31, 1945). Some shoreline mapping was done by Vulcan Syndicate in 1946 (Non-confidential Assessment File No. 91159).
- 1956-1961 Juno claims staked over the property by T. Wass
- 1963-1964 Bray claims staked by Kenneth Bray
- 1965 Kerr Addison Mines Limited did an airborne EM/Mag survey (Non-confidential Assessment File No. 91652).
- 1970 Another airborne EM survey was done by Sherritt Gordon Mines, Limited (Non-confidential Assessment File No. 91684).
- 1972-1977 Wass claims staked over the property by Carl E. Wass
A base metal exploration program was carried out in the area by the Manitoba Government in 1976 (Petak, 1976; see Preliminary Map, Unpublished Information Files).

NAME OF PROPERTY
Heart Island (IXL Group)

N.T.S. AREA 53E/16 SE

FILE NO. 993
REF. AU 2

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In December 1980, BP Minerals Limited staked Bay 5 (CB 12782) and Bay 6 (CB 12783) over the property. From January to April and May to July 1981, BP carried out geophysical surveys and basal till and bedrock sampling, respectively. In the winter of 1983, BP carried out an overburden drilling program.

REFERENCES

- Cole, G.E., 1938 (June), The Mineral Resources of Manitoba; Province of Manitoba, Economic Survey Board, p. 166.
- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch Publication, p. 54.
- Gilbert, H.P., 1984, Island Lake project (53E/16 SE); in Manitoba Energy and Mines, Mineral resources, Report of Field Activities, 1984, p. 120-125.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 38.
- Manitoba Mines Branch:
- a) Unpublished Information Files; 53E/9, 10, 15, 16; 53E/16.
 - b) Non-confidential Assessment Files; File No. 91159, 91162, 91652, 91684.
 - c) Annual Report on Mines and Minerals; 5th, p. 36; 6th, p. 41; 7th, p. 59; 8th, p. 80; 17th, p. 83; 18th, p. 74, 80.
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Petak, H.W., 1976, Island Lake (53E/15 SE, 16 SE & SW and 53F/12 NW); in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Mineral Evaluation & Administration Branch, Exploration Operations Branch, Report of Field Activities, 1976, p. 71-73.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Quinn, H.A. and Meinert, R.S., 1959, The Island Lake Series; The Precambrian, v. 32, No. 4, p. 16-25, 34.
- Robinson, A.H.A., 1935, Gold in Canada; Mines Branch, Ottawa, Report 769.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
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- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
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NAME OF PROPERTY
Heart Island (IXL Group)

N.T.S. AREA 53E/16 SE

FILE NO. 993
REF. AU 2

REFERENCES cont'd

- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
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- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map ER79-2-5, Island Lake area, (Compilation of Geology and Exploration work), Scale 1:50 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by Meinert, R.J., Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
- #Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Preliminary Compilation Map, Loonfoot Island - Area 1, (Geology), Scale 1:16 000, Unpublished Information Files, Manitoba Mines Branch (1976).
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Claim Map Series SE 16, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY

Heart Island (IXL Group)

N.T.S. AREA 53E/16 SE

FILE NO. 993

REF. AU 2

REMARKS

Map 26-1960 locates a gold, lead and copper occurrence in the area immediately southeast of Heart Island. Chalcopyrite and pyrite was reported in drill core from a small island south of Heart Island (Blue Quartz claim, DDH S.8, Non-confidential Assessment File No. 91159).

Pyrite, chalcopyrite and galena was reported in drill core from Samar No. 3 north of Heart Island (DDH S.6; Non-confidential Assessment File No. 91159).

A preliminary map (Unpublished Information Files) shows a pyrite occurrence at the east end of Heart Island and a gossan area on the former I.X.L. 5 claim.

Comp./Rev.	JR	PA
By Date	09-87	04-90

PRODUCT Molybdenum

N.T.S. AREA 53E/16 SW

REF. MO 1

NAME OF PROPERTY:
Harper Island WestOWNER OR OPERATOR AND ADDRESS
1990 - Open

OBJECT LOCATED: Mo showing

MINING DIVISION Winnipeg

Lat. 53° 50.60'

Long. 94° 16.60'

UNCERTAINTY: 100 m

Sec.

Tp. 56

R. 22 EPM

DESCRIPTION OF DEPOSIT

Quartz-filled shears occur at the contact between Precambrian granite, and andesite of the Hayes River Group. One narrow quartz vein assayed a trace of gold (Godard, 1963, Locality 13). On another island, a 0.3 m (1 ft) wide quartz vein, with stringers, contains coarse grains of molybdenite (McMurchy, 1944). Molybdenite also occurs in the surrounding dyke. Pyrite is present in quartz veins and in country rock. Preliminary Map 1985 I-4 indicates a pyrite-chalcopryrite-malachite occurrence on one of the islands and a gold-silver-pyrite-chalcopryrite-malachite occurrence on the larger of the two islands. A gold-molybdenite-pyrite-chalcopryrite-malachite occurrence is indicated near the west end of Harper Island.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit was noted by J.D. Godard in 1963 on Map 59-3 B as "Locality No. 13". The deposit is on two small islands immediately west of Harper Island in Island Lake, about 274 km southeast of the Hudson Bay railway line.

McMurchy (1944) reported copper and iron staining "on a small island nearby and west of Harper Island". According to him, a grab sample of a quartz vein (heavily mineralized with pyrite) returned 70 cents gold per ton.

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684).

Associated minerals or products of value
gold, silver.

NAME OF PROPERTY
Harper Island West

N.T.S. AREA 53E/16 SW

FILE NO. 327
REF. MO 1

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1821.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area (53E/13 NE and NW; 53E/16 SE and SW; 63H/16 NE), in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 199.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 44.
- McMurphy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 9.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.
- Unpublished Map Island Lake Series, (Geology), Scale 1:31 680 by R.J. Meinert, Unpublished Information Files (53E/16), Manitoba Mines Branch (1956).
- #Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Preliminary Map 1985 I-4, Meegees'waseeson Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).

REMARKS

A grab sample assay of 0.15% Mo was reported from Loonfoot Island (Non-confidential Assessment File No. 92152).

Comp./Rev.		CC	PA
By Date	12-63	02-74	05-90

PRODUCT GOLD

N.T.S. AREA 53E/16 SE

REF. AU 3

NAME OF PROPERTY

Zolata

OWNER OR OPERATOR AND ADDRESS

1990-BP Minerals Limited
Suite 1700
55 University Ave.
Toronto, Ontario
M5J 2H7

OBJECT LOCATED Au occurrence

Mining Division Winnipeg

Lat. 53° 45.12'

Long. 94° 05.3'

UNCERTAINTY: 200 m

Sec.

Tp. 55

R. 22 EPM

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Hayes River Group andesite and dacite flows. Godard (1963) observed that "schistose" volcanic rocks in the area contained quartz and quartz-carbonate veins with sparse pyrite and locally chalcopyrite. More recently, Theyer (1982) described a "mineralized zone extending from the Zolota occurrence to Reahil Island" that consists of a 100-150 m wide silicification halo with a central sulphide-bearing quartz vein. The sulphide content of the vein ranged from 1 to 25% and returned "selected grab samples" that assayed up to 129.6 g/t (3.78 oz/ton) gold.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located at the southeast end of Okay Island, which is approximately 257 km southeast of the Hudson Bay railway line.

Following is a chronological list of the claim history of the property:

- 1932-1934 Frances Lake, Frances Lake 1, 2, 3 (W 478-81) claims staked over the property by W.F. Woods.
- 1937-1939 Neptune No. 17 (W 8302) staked over the property by B.J. O'Day for Roy T. Pickard.
- 1948-1954 Zolata 2 (W 16541) claim staked over the property by J.G. Reahil. God's Lake Gold Mines Limited held an unrecorded interest in this claim. In 1948, 101 m² (1092 cu ft) of rock and overburden was removed from 2 pits on Zolata No. 2. In 1950, a 4-hole 159 m (523 ft) drill program was carried out by Eco Exploration Company Limited on behalf of God's Lake. Well mineralized quartz, containing chalcopyrite, pyrite, and some pyrrhotite, and gold, was noted in andesite drill core (Non-confidential Assessment File No. 91146). The maximum assay for gold was 3.09 g/t (0.09 oz) over 0.3 m (1 ft).
- 1957-1959 Okay 1, 2 (W 27612, 13) claims staked over the property by E.B. Turner.
- 1961-1971 Ron 1 - 4 (W 33889 - 92) claims staked over the property by Carl E. Wass. Work was reported on the claims from 1962 to 1966. In 1962-63, 93 m² (1000 cu ft) of trenching was done on Ron No. 2 (W 33890). Two gold showings are indicated on the shore of Okay Island (Ron No. 2; Mining Recording File No. 58973).

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1965 Kerr Addison Mines Limited did an airborne EM/Mag survey under Airborne Permit No. 56 (Non-confidential Assessment File No. 91652). Ron 2 and 3 were cancelled in 1968. Ron 1 was cancelled in 1969. Work was reported on the Ron No. 4 claim in 1968 and in 1970, before cancellation in 1971. In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684).

1972 Wass 46 (W 44322) and Tory 1 (W 44191) staked over the property by Carl E. Wass.

1976 Tory 1 cancelled

1977 Wass 46 cancelled

In December 1981, BP Minerals Limited staked Bay 37 (CB 12993) over the property. From January to April and May to July 1981, BP carried out geophysical surveys and basal till and bedrock sampling, respectively. A rock sampling program was carried out by the Manitoba Government in 1982 (Theyer, 1982).

REFERENCES

- Cole, G.E., 1938 (June), The Mineral Resources of Manitoba; Province of Manitoba, Economic Survey Board, p. 166.
- Davies, J.F., Bannatyne, B.B., Barry, G.S., and McCabe, H.R., 1962, Geology and Mineral Resources of Manitoba; Manitoba Mines Branch Publication, p. 54.
- Gilbert, H.P., 1984, Island Lake project (53E/16 SE); in Manitoba Energy and Mines, Mineral resources, Report of Field Activities, 1984, p. 120-125.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, p. 44.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File Nos. 91146, 91162, 91652, 91684.
 - b) Mining Recording Files; File No. 38136 (Zolata No. 2); No. 58973 (Ron No. 2)
 - c) Annual Report on Mines and Minerals; 5th, p. 36; 6th, p. 41; 7th, p. 59; 8th, p. 80; 23rd, p. 51, 65.
- McMurchy, R.C., 1944, Geology of the Island Lake area; The Precambrian, v. 17, No. 9, p. 4-9, 17.
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Quinn, H.A. and Meinert, R.S., 1959, The Island Lake Series; The Precambrian, v. 32, No. 4, p. 16-25, 34.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-33.
- Robinson, A.H.A., 1935, Gold in Canada; Mines Branch, Ottawa, Report 769.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.

NAME OF PROPERTY

Zolata

N.T.S. AREA 53E/16 SE

FILE NO. 292

REF. AU 3

REFERENCES

- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes; C.I.M.M. Bulletin, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35553G, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying report by Wright (1928), Geological Survey of Canada.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying report by Godard (1963), Manitoba Mines Branch.
- Preliminary Map 1985 I-3, Loonfoot Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Claim Map Series SE 16, 53E, Scale 1:31 680, Mining Recording, Manitoba Mines Branch.

REMARKS

This occurrence was previously documented as 53E/16 CU 1 (circa 1974).

Fuchsite schist with pyrite, arsenopyrite and carbonate was found north of Bluff Island (Gilbert, 1984, p. 122, 125).

Comp./Rev.	CC	JR	PA
By Date	12-63	01-74	09-87
0367J			04-90
		- 3 -	



PRODUCT Zinc

N.T.S. AREA 53F/12 NW

REF. ZN 1

NAME OF PROPERTY

Sag 36, 39, 40

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.
P.O. Box 1480
North Battleford
Saskatchewan
S9A 3W1

OBJECT LOCATED drill hole #8 (Sag 40 claim) Mining Division Winnipeg

Lat. 53° 43.32'

Long. 93° 58.37'

UNCERTAINTY: 500 m

Sec.

Tp. 54, 55

R. 1 E 2

DESCRIPTION OF DEPOSIT

The area is underlain by Precambrian andesite, dacite, basalt and derived schists of the Hayes River Group which have been intruded by diorite, gabbro and associated rocks and by tonalite-granodiorite gneiss (Map 60-2). Disseminated to semi-massive sulphides consisting mainly of pyrite, pyrrhotite, and some chalcopyrite was noted in drill core. One drill hole intersected a 3.7 m (12.3 ft) section of massive sulphides, which assayed up to 0.2% Zn.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at the west end of Sagawitchewan Bay, on the south side. It is 18 km west of the Manitoba-Ontario border near Island Lake. The Hudson Bay railway line is about 290 km to the northwest.

The area was first staked as Fairbanks Nos. 1, 10 (W 1465, 1474) for R.E. Lindholm in 1932. The claims were cancelled in 1934.

In 1965 an airborne EM/magnetometer survey was done by Canadian Aero Mineral Surveys Limited for Kerr Addison Mines Limited (Non-confidential Assessment File No. 91144). In 1966, Sag Nos. 36, and 39, 40 were staked by R.H. Schwandt, and C. Ridder, respectively, and assigned to Kerr Addison Mines Limited a few months later. A ground EM survey and 82 m of diamond drilling was done that year (Non-confidential Assessment File Nos. 91160, 91402). Results of the drilling are summarized as follows:

<u>Claim</u>	<u>DDH No.</u>	<u>Drilled depth</u>	<u>Width/Assay</u>
Sag 36	7	21 m (70 ft)	2.6 m (8.7 ft) of 0.04% Cu, 0.18% Zn at a depth of 2.4 m (7.8 ft).
Sag 39	12	43 m (141 ft)	10.5 m (34.5 ft) of up to 0.04% Cu, 0.02% Ni, trace Zn at depth of 29.8 m (97.9 ft).
Sag 40	8	18 m (59 ft)	3.7 m (12.3 ft) of up to 0.04% Cu, 0.2% Zn at depth of 11.4 m (37.5 ft).

Sag 40 was cancelled in 1969. Sag 36, 39 were cancelled in 1970.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper, nickel

1945 '0'

- 1 -

NAME OF PROPERTY

Sag 36, 39, 40

N.T.S. AREA 53F/12 NW

FILE NO. 1036

REF. ZN 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In December 1987, Don 2 (W 52097) was staked by Cobham River Mines Ltd.. The claim was transferred to Corona Corporation in December 1988, and back to Cobham River Mines Ltd. in February 1990.

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Godard, J.D., 1963, Geology of the Sagawitchewan Bay area; Manitoba Mines Branch, Publication 60-2, 28p.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 91144, 91160, 91162, 91402.
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-33.
- Theyer, P., 1980, Stratigraphic setting of selected ultramafic bodies in the Superior and Churchill Provinces and certain aspects of nickel copper deposits in the Thompson Nickel Belt; Manitoba Energy and Mines, Mineral Resources Division, Economic Geology Report ER79-2, 71p.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson, Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1980, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53F, Opasquia Lake (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 3656G, Hayward Lake (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).

NAME OF PROPERTY

Sag 36, 39, 40

N.T.S. AREA 53F/12 NW**FILE NO.** 1036**REF.** ZN 1

MAP REFERENCES cont'd

- Map 35653G, Opasquia Lake, Ontario-Manitoba, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- Map 60-2, Sagawitchewan Bay (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Map ER79-2-1, Superior Province, northern segment, (Index Map showing location of greenstone belts), Scale 1:500 000 - Accompanying Report by Theyer (1980), Manitoba Mineral Resources Division.
- *Claim Map Series NW 12, 53F, Scale 1:31 680, circa 1970, Mining Recording, Manitoba Mines Branch.

Comp./Rev.

PA

By Date

07-90



PRODUCT GOLD

N.T.S. AREA 53F/12 NW

REF. AU 1

NAME OF PROPERTY

Indian Group
(Indian No. 2, 4)

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.
P.O. Box 1480
North Battleford
Saskatchewan
S9A 3W1

OBJECT LOCATED Au showing

Mining Division Winnipeg

Lat. 53° 43.9'

Long. 93° 53.1'

UNCERTAINTY: 50 m

Sec.

Tp. 55

R. 1 E 2

DESCRIPTION OF DEPOSIT

The occurrence is located on a small island in Sagawitchewan Bay that is underlain by Precambrian Hayes River Group andesite flows and correlative schists. A shear zone in the andesite contains an pyrite-bearing quartz vein that strikes easterly, has a known strike length of 61 m (200 ft) and is up to 0.4 m (1.5 ft) wide. The wall rocks to the vein also contain appreciable pyrite. McMurphy (1944) reported that a grab sample of "vein material" assayed "\$0.26 per ton" gold.

More recently, Theyer (1982) observed that a number of gold deposits/occurrences (Island Lake Mine, Indian, Sundog, Cowan and Savage Island) occur along the interface between Hayes River Group and Island Lake Group rocks. He suggested the interface is a prime target for gold since: 1) ultramafic rocks are a potential source of gold; 2) carbonatization of the ultramafic rocks provides a mechanism for liberation of contained gold; 3) intensely sheared rocks in the area of the ultramafic rocks provide favourable sites for deposition of gold and 4) geochemically anomalous concentrations of Au, As, and W were found in samples taken from rock units adjoining areas underlain by ultramafic rocks.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on a small island in Sagawitchewan Bay, about 8 km from its west end. Sagawitchewan Bay lies between the Manitoba-Ontario Border and adjoining Island Lake. The Hudson Bay railway line is about 290 km to the northwest.

In 1932 F.L. Woods and P.J. Montequé staked Indian No. 2 (W 1004) and No. 4 (W 935), respectively over the deposit. Shortly afterward they assigned the property to Thayer Lindsley of Ventures Limited. Four test pits were dug on the north end of Indian No. 2; and 2 holes, totalling 184 m (602 ft), were drilled on Indian No. 2 and No. 4. Results are not known. The claims were cancelled in 1936.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Silver, zinc, lead.

NAME OF PROPERTY

Indian Group (Indian No. 2, 4) N.T.S. AREA 53F/12 NW

FILE NO. 91**REF. AU 1****HISTORY OF EXPLORATION AND DEVELOPMENT cont'd**

McMurchy (1944) reported that a grab sample assayed "26 cents [sic] gold per ton". In 1945, W.N. Baker and A. Baker staked B.B. Nos. 7, 8 and A.B. Nos. 1, 2 (W 13340, 1, 3, 4) over the deposit. These claims "were staked on behalf of San Antonio Gold Mines Limited. A wholly owned subsidiary, Two Hearts Exploration Limited, was incorporated in 1945 to undertake exploration on the property." (Godard, 1963). Again, results are not known, but the claims were cancelled in 1948.

More recent claim history of the property is as follows:

<u>Year</u>	<u>Claim Name</u>	<u>Claim Number</u>	<u>Owner</u>
1963-65	Rex Nos. 2-5	W 36536-9	C.E. Wass
1965-66	Rex No. 1	W 38819	C.E. Wass
1972-74	Tex No. 1	W 44324	C.E. Wass
1980-85	Bay 18,19	CB 12795-6	BP Minerals Limited

In 1981-1982, BP Minerals Limited carried out geophysical (combined VLF-EM and magnetometer) and geochemical (rock chip, lake-bottom bedrock, humus, and soil sampling) surveys and geological mapping at a scale of 1:5000. The 1981 humus sampling program identified two anomalous areas with corresponding high arsenic values and found a high background value of 42 ppb Au for pyritic quartz-sericite schists. However, results were not reproduced by a follow-up humus sampling program in 1982. A 1.5 m (5 ft) chip sample (#GJC 016) of pyrite-quartz-sericite schist from the north part of the island returned 4.8 g/t (0.14 oz/ton) Au, 3.43 g/t (0.10 oz/ton) Ag, 1100 ppm Pb. A sulphide-rich grab sample (GJC 017) from the southwest part of the island returned 5.83 g/t (0.17 oz/ton) Au, trace Ag, 1100 ppm Zn, 1200 ppm Pb.

In 1987, Bulldog 3 (W 51708) was staked by Angus M. McKenzie for Cobham River Mines Ltd. The claim was transferred to Corona Corporation in 1988, and back to Cobham River Mines Ltd. in 1990.

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Godard, J.D., 1963, Geology of the Sagawitchewan Bay area; Manitoba Mines Branch, Publication 60-2, p. 27, 28.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 91161, 91162
 - b) Mining Recording Files; File Nos. 13974, 13902 (Indian No. 2, No. 4)
- McMurchy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4, 9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.

NAME OF PROPERTY

Indian Group (Indian No. 2, 4) N.T.S. AREA 53F/12 NW

FILE NO. 91**REF. AU 1**

REFERENCES cont'd

- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities 1980, Report GS-8, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53F, Opasquia Lake (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 3656G, Hayward Lake (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35653G, Opasquia Lake, Ontario-Manitoba, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- #Map 60-2, Sagawitchewan Bay (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Claim Map Series NW12, 53F, Scale 1:31 680, circa 1936, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY

Indian Group (Indian No. 2, 4) N.T.S. AREA 53F/12 NW

FILE NO. 91

REF. AU 1

REMARKS

1. BP Minerals identified a humus anomaly (35 ppb Au, 1.3 ppm Ag) on the northeast part of the large island to the south (Bay 19 claim), where a 15 cm wide horizon of massive pyrite was noted; a rock sample returned 1000 ppb Au. About 750 m west of this anomaly, a 10-30 cm wide quartz vein, exposed over a length of 10 m, returned 370 ppb Au, 19.8 ppm Ag, 309 ppm As, 449 ppm Cu, 4710 ppm Pb. About 100 m south of the anomaly, a rock chip sample of cherty iron formation returned 230 ppb Au.
2. BP Minerals also reported up to 1900 ppm Zn from an island 1.84 km northeast (Bay 20 claim).

Comp./Rev.	CC	JR	PA
By Date	3-74	09-87	06-90

PRODUCT GOLD

N.T.S. AREA 53F/12 NW

REF. AU 2

NAME OF PROPERTY

Sundog Group
(Sundog No. 3, 4, 6)

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.
P.O. Box 1480
North Battleford
Saskatchewan
S9A 3W1

OBJECT LOCATED No. 2 post of Sundog 3

Mining Division Winnipeg

Lat. 53° 44.3'

Long. 93° 59.6'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 1 E 2

DESCRIPTION OF DEPOSIT

The occurrence is located along the northeast shore of Reahil Island, which is underlain by Precambrian Hayes River Group andesite, dacite, basalt and correlative schist. The occurrence consists of two gold-bearing quartz veins that occur in an intensely sheared and carbonatized zone within altered volcanic rocks. The first vein strikes easterly, is 0.6 m (2 ft) wide, has a possible strike length of 82 m (270 ft) and contains disseminated pyrite and chalcopyrite. "Selected grab samples" taken from the vein assayed 31.9, 28.5, and 16.5 g/t (0.93, 0.83 and 0.48 oz/ton) gold. A diamond drill hole intersected 28.5 g/t (0.83 oz/ton) gold over a core length of 1.8 m (6 ft). The second vein, which is located approximately 137 m (450 ft) east-southeast of the first vein and is subparallel to it, is 0.9 m (3 ft) wide and has a known strike length of 39.6 m (130 ft). A channel sample of the vein assayed 8.9 g/t (0.26 oz/ton) gold; a diamond drill hole collared 7.6 m (25 ft) west of the most westerly surface exposure intersected the vein at a depth of 19.5 m (64 ft) and yielded only trace amounts of gold.

More recently, Theyer (1982) observed that a number of gold deposits/occurrences (Island Lake Mine, Indian, Sundog, Cowan and Savage Island) occur along the interface between Hayes River Group and Island Lake Group rocks. He suggested the interface is a prime target for gold since: 1) ultramafic rocks are a potential source of gold; 2) carbonatization of the ultramafic rocks provides a mechanism for liberation of contained gold; 3) intensely sheared rocks in the area of the ultramafic rocks provide favourable sites for deposition of gold and 4) geochemically anomalous concentrations of Au, As, and W were found in samples taken from rock units adjoining areas underlain by ultramafic rocks.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located at the west end of Sagawitchewan Bay; on the east end of Reahil Island and a few hundred metres to the east and southeast on the mainland. Sagawitchewan Bay lies between the Manitoba-Ontario Border and adjoining Island Lake. The Hudson Bay railway line is about 290 km to the northwest.

ASSOCIATED MINERALS OR PRODUCTS OF VALUE

Copper
0317J

NAME OF PROPERTY

Sundog Group (Sundog No. 3, 4, 6) N.T.S. AREA 53F/12 NW

FILE NO. 92**REF. AU 2**

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

In 1932, Rush No. 10 and No. 11 (W 1453,4) were staked over the deposit by F.M. Smith and a year later assigned to T.C. Anderson of the W.A.D. Syndicate. Three pits were dug on the vein, probably at this time. They were dug across 31 m (100 ft) along the eastern extension of the vein. Two grab samples from the vein assayed 31.9 g/t (0.93 oz/ton) gold and 16.5 g/t (0.48 oz/ton) gold. A grab sample from the assumed western end of the vein assayed 28.5 g/t (0.83 oz/ton) gold. These samples were probably taken by Godard (see Godard, 1963, p. 27). The claims were cancelled in 1936.

J.G. Reahil staked Sundog Nos. 3, 4 and 6 (W 13106,7,9) over the deposit in 1945. A year later, Hollinger Consolidated Gold Mines, Limited optioned the property.

In 1948, five x-ray diamond drill holes, totalling 94 m (308 ft), were drilled on Sundog Nos. 3 and 4. Assays from the cores revealed trace to 42.2 g/t (1.23 oz/ton) gold, primarily in the upper 3 m (10 ft) of the holes. A 0.9 m (3-foot) channel sample on a vein on Sundog No. 4 assayed 8.9 g/t (0.26 oz/ton) gold; a quartz stringer returned 3.4 g/t (0.1 oz/ton) gold. The claims were cancelled in 1948 and the deposit was not staked again until 1963.

More recent claim history is as follows:

<u>Year</u>	<u>Claim Name</u>	<u>Claim Number</u>	<u>Staker</u>
1963	Lynx Nos. 1, 2	W 36307, 8	I. Bennett
	-assigned G.V. McBride in 1963		
	Mink No. 1	W 36224	G.V. McBride
	-Lynx Nos. 1, 2 and Mink No. 1 assigned to M.C. Mosher in 1963		
	-both cancelled by 1965		
1973	CB 5948		R. Fenton
	-assigned A. Van der Brink in 1973		
	-cancelled in 1974		
1981	Bay 34	CB 12990	BP Minerals Limited
	-BP carried out geophysical, geochemical and geological mapping surveys.		
	One rock sample (from Reahil Island) returned up to 44 ppb Au.		
	-cancelled in 1985		
1987	Sunshine 1, 2	W 51703-4	Cobham River Mines Ltd.
	-transferred to Corona Corporation in 1988		
	-transferred to Cobham River Mines Ltd. in 1990.		

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Godard, J.D., 1963, Geology of the Sagawitchewan Bay area; Manitoba Mines Branch, Publication 60-2, p. 26-27.

Manitoba Mines Branch:

- Non-confidential Assessment Files; File No. 91162
- Mining Recording Files; Files Nos. 32121, 2, 4 (Sundog Nos. 3, 4, 6)

NAME OF PROPERTY

Sundog Group (Sundog No. 3, 4, 6) N.T.S. AREA 53F/12 NW

FILE NO. 92**REF. AU 2**

REFERENCES cont'd

- McMurchy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4, 9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-33.
- Theyer, P., 1978, Stratigraphic position of ultramafic lenses in the Island Lake area; in Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Report of Field Activities, 1978, Report MEA-2, p. 106-108.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities 1980, Report GS-8, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior Province: a) Island Lake, and b) Bird River sill; in Manitoba Energy and Mines, Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Energy and Mines, Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Theyer, P., 1985, Ultramafic rocks of the Island Lake area; Manitoba Energy and Mines, Geological Services, Geological Paper GP84-1, 29p.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53F, Opasquia Lake (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 3656G, Hayward Lake (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35653G, Opasquia Lake, Ontario-Manitoba, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- Map 60-2, Sagawitchewan Bay (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Claim Map Series NW 12, 53F, Scale 1:31 680, circa 1948, Mining Recording, Manitoba Mines Branch.

Comp./Rev.**CC****JR****PA****By Date**

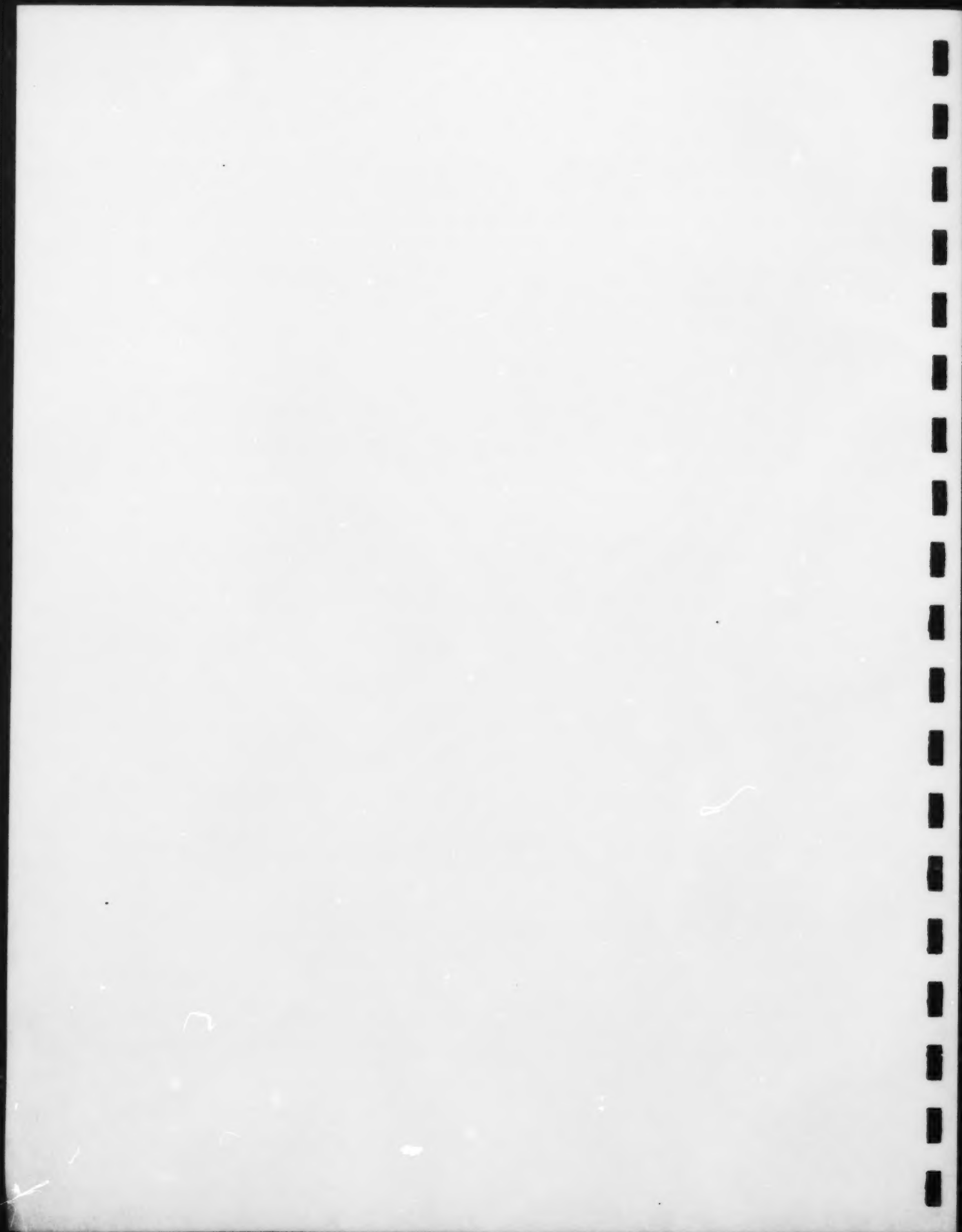
3-74

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- 3 -



PRODUCT GOLD

N.T.S. AREA 53F/12 NW

REF. AU 3

NAME OF PROPERTY

Cowen

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.
P.O. Box 1480
North Battleford
Saskatchewan
S9A 3W1

OBJECT LOCATED Au occurrence

Mining Division Winnipeg

Lat. 53° 44.0'

Long. 93° 55.9'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 2 E 2

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Hayes River Group andesite, dacite, and basalt flows and correlative schists. The only reference to this occurrence is in Non-confidential Assessment File No. 91162. In the file, a map locates a gold occurrence in the area covered by the Cowen group of claims.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit is located on the southern tip of a peninsula which juts into Sagawitchewan Bay, near its western end. Sagawitchewan Bay lies between the Manitoba-Ontario Border and adjoining Island Lake. The Hudson Bay railway line is about 290 km northwest.

The following claims were staked over the property:

Year	Claim Name	Claim Number	Staker
1932-33	West Annex 1	W 1257	Joseph MacDonald
1944	Mac No. 1, 2, 4	W 12620-21, 23	M.A. McLeod
	Mac No. 5, 7, 8	W 12624, 26-27	
	-cancelled in 1947		
1947	Cowen No. 1-2, 4	W 15394-95, 97	Adam S. Bellingham
	Cowen, Cowen 6-7	W 15393, 99, 15400	
	-assigned 25% interest to Herbert Stewart Cowen in 1947.		
	-work was reported in 1948. Hollinger Consolidated Gold Mines, Limited may have had an option on the property.		
	-Cowen 1, 4 were cancelled in 1948.		
	-Cowen, Cowen 2, 6, 7 were cancelled in 1949.		
1980	Bay 16, 17	CB 12793, 94	BP Minerals Limited
	-BP carried out geophysical, geochemical and geological mapping surveys.		
	-cancelled in 1985		
1987	Bulldog 1	W 51706	Cobham River Mines Ltd.
	-claim transferred to Corona Corporation in 1988		
	-transferred back to Cobham River Mines Ltd. in 1990.		

NAME OF PROPERTY
Cowen

N.T.S. AREA 53F/12 NW

FILE NO. 93
REF. AU 3

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Godard, J.D., 1963, Geology of the Sagawitchewan Bay area; Manitoba Mines Branch, Publication 60-2, p. 27-28.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 91162
 - b) Mining Recording Files; File Nos. 30520, 21, 23, 24, 26, 27 (Cowen No. 1, 2, 4, Cowen, Cowen 6, 7; Mac No. 1-2, 4-5, 7-8).
- McMurchy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4-6, 9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1981, Mineral deposit studies-Superior province: a) Island Lake, and b) Bird River sill; in Manitoba Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Theyer, P., 1982, Mineral deposit investigations-Superior Province, I) Island Lake area, II) Bird River Sill (southeastern Manitoba); in Manitoba Mineral Resources Division, Report of Field Activities, 1982, Report GS-9, p. 55-57.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

MAP REFERENCES

- Map 53F, Opasquia Lake (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 3656G, Hayward Lake (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35653G, Opasquia Lake, Ontario-Manitoba, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- #Map, (Geology), by P. Davidson (Hollinger Consolidated Gold Mines, Limited) in Non-confidential Assessment File No. 91162, Manitoba Mines Branch (1948).
- *Map 60-2, Sagawitchewan Bay (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Claim Map Series NW12, 53F, Scale 1:31 680, circa 1948, Mining Recording, Manitoba Mines Branch.

NAME OF PROPERTY
Cowen

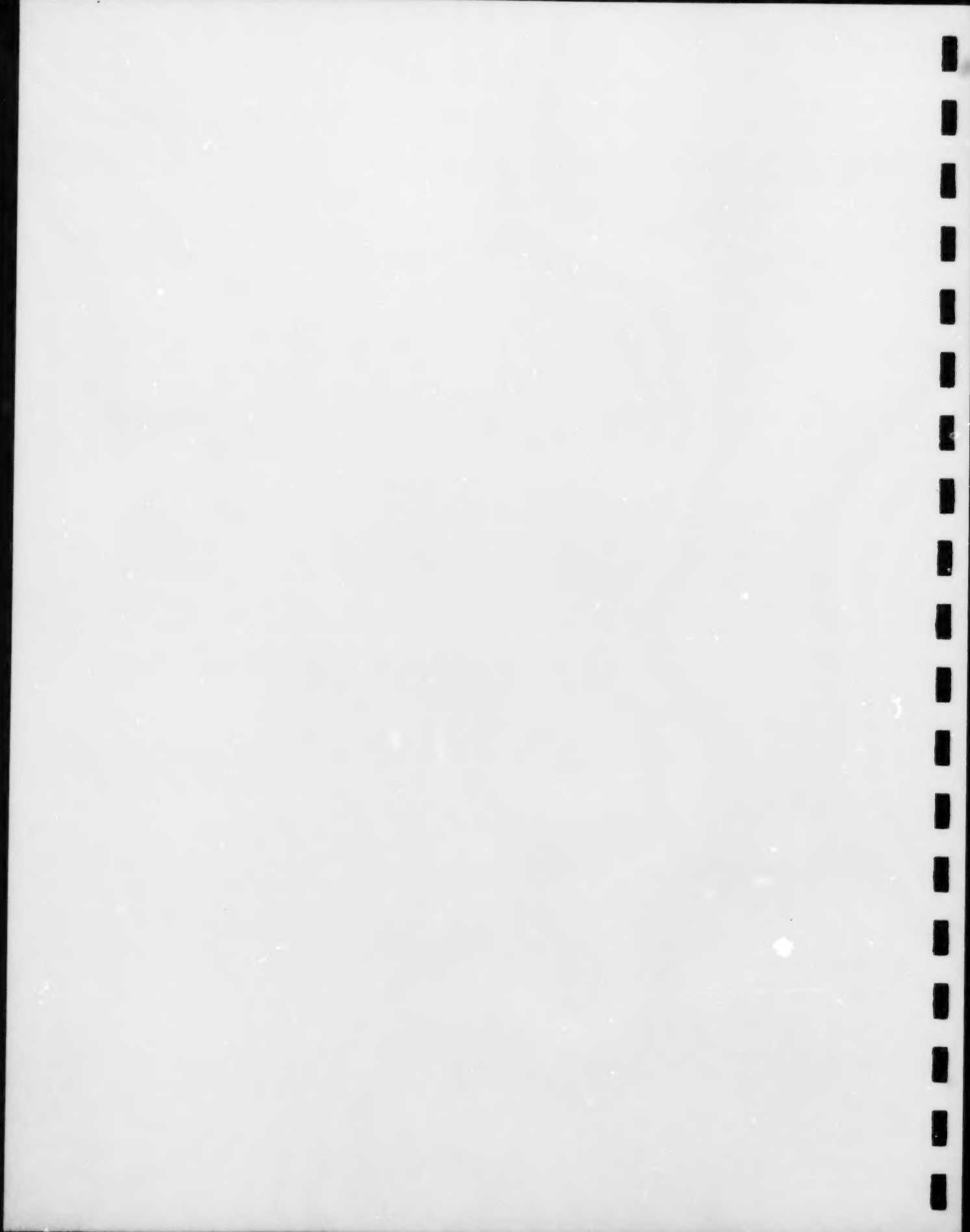
N.T.S. AREA 53F/12 NW

FILE NO. 93
REF. AU 3

REMARKS

BP Minerals Limited reported the following assays: 160 ppb Au for a rock sample collected from an area 1 km east; 250 ppb Au for a float taken from an island (Bay 17 claim) 640 m east-northeast.

Comp./Rev.	CC	JR	PA
By Date	03-74	09-87	06-90



PRODUCT GOLD

N.T.S. AREA 53F/13 SW

REF. AU 1

NAME OF PROPERTY

N.B., C.C., R.G. Group

OWNER OR OPERATOR AND ADDRESS

1990-Cobham River Mines Ltd.
P.O. Box 1480
North Battleford
Saskatchewan
S9A 3W1

OBJECT LOCATED Centre of claim

Mining Division Winnipeg

Lat. 53° 45.1'

Long. 93° 53.02'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 1 E 2

DESCRIPTION OF DEPOSIT

The property is underlain by Precambrian Hayes River Group andesite, dacite, and basalt flows and correlative schists that are intruded to the north by 'Early Plutonic Suite' granodiorite. The occurrence consists of an east-trending gold-bearing quartz vein that occurs at the contact between andesite volcanic rocks and granodiorite. The vein averages 0.3 m (1 ft) wide and is exposed in outcrop for a length of 457 m (1500 ft). Diamond drilling apparently intersected "values" over a strike length of 457 m (1500 ft) but the width of the vein was "disappointing". A sample from the western part of the vein assayed trace amount of gold; a second sample taken "14 800 feet (4.5 km) along the vein east of the first location" yielded 46.63 g/t (1.36 oz/ton) gold (Godard, 1963). Trace amounts of gold were also identified in granodiorite.

HISTORY OF EXPLORATION AND DEVELOPMENT

The occurrence is located on the north shore of Sagawitchewan Bay (Godard, 1963; Map 60-2, locality 2). The property was first staked in 1945 as part of a 99 claim group (including the A.B., A.D., B.B., C.C., C.S., D.C., J.C., R.G. groups) held by San Antonio Gold Mines Limited. A wholly owned subsidiary, Two Hearts Exploration Limited, was incorporated that year to undertake exploration work on the property. A 57-hole, 3020 m (9909 ft), drill program and a series of 8 trenches intersected the vein along strike.

Two gold occurrences and a 2.4 km shear zone are shown on a map in Non-confidential Assessment File No. 91162. The claim history for this particular area is as follows:

Year	Claim Name	Claim Number	Staker
1945	C.C. 5, 9	W 13309, 15	C. Caswell
	R.G. 4, 8	W 13281, 85	R.G. Goddard
	N.B. 3	W 13327	N.A. Black.
- four years work applied on these claims in 1946. - C.C. 5 cancelled in 1949. - rest of claims cancelled in 1950.			
1963	Ken 1-3	W 36296-98	Kenneth Bray
	- assigned immediately to G.V. McBride. - cancelled in 1964.		

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

More recent claim history is as follows:

<u>Year</u>	<u>Claim Name</u>	<u>Claim Number</u>	<u>Staker</u>
1972		CB 5284, 5285	C.E. Wass
	- assigned to P.D. Holden in 1973		
	- cancelled in 1974.		
1981	Bay 45	CB 13001	B.P. Minerals Limited
	-some geological mapping was done in 1982.		
	-cancelled in 1984.		
1984	Bob 1	W 50343	E.W. Bazinet
	Saga 5	W 48887	W. Bruce Dunlop Limited (N.P.L.)
	- cancelled in 1986.		
1987	Andrew	W 51701	Cobham River Mines Ltd.
	Vince 1	W 52050	
	- claims were transferred to Corona Corporation in 1988. Two years work was applied on Andrew (W 51701) in 1988. Three years work was applied on both claims in 1989.		
	- claims were transferred back to Cobham River Mines Ltd. in 1990.		

REFERENCES

- Derry, D.R. and MacKenzie, G.S., 1931, Geology of the Ontario-Manitoba boundary (12th base line to latitude 54); in Province of Ontario, Ontario Department of Mines, 40th Annual Report, v. XL, Part II, p. 1-20.
- Godard, J.D., 1963, Geology of the Sagawitchewan Bay area; Manitoba Mines Branch, Publication 60-2, p. 27, 28.
- Manitoba Mines Branch:
- Non-confidential Assessment Files; File No. 91162
 - Mining Recording Files; File Nos. 70247, 48 (CB 5284, 85); File Nos. 32646, 32650, 32618, 32622, 32664 (C.C. 5, 9, R.G. 4, 8, N.B. 3);
 - Annual Report on Mines and Minerals; 18th, p. 14, 71; 19th, p. 69; 20th, p. 95-96.
- McMurphy, R.C., 1944, Geology of the Island Lake area, Manitoba; The Precambrian, Vol. 17, No. 9, p. 4, 9, 17.
- Meinert, R.J., 1957, Island Lake Series (Precambrian), east Island Lake, Manitoba; M. Sc. Thesis, University of Cincinnati.
- Richardson, D.J. and Ostry, G., 1987, Gold deposits of Manitoba; Manitoba Energy and Mines, Economic Geology Report ER86-1, p. 31-32.
- Theyer, P., 1980, Stratigraphic investigations of the Island, Stevenson-Ponask, Bigstone and Knight Lakes areas and of the Island Lake gold mine; in Manitoba Mineral Resources Division, Report of Field Activities, 1980, Report GS-8, p. 38-42.
- Theyer, P., 1981, Mineral deposit studies-Superior province: a) Island Lake, and b) Bird River sill; in Manitoba Mineral Resources Division, Report of Field Activities, 1981, Report GS-16, p. 74-77.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.
- Wright, J.F., 1932, Geology and gold prospects of the areas about Island, Gods, and Oxford Lakes, Manitoba; The Canadian Institute of Mining and Metallurgy, v. 35, No. 8, p. 440-454.

NAME OF PROPERTY
N.B., C.C., R.G. Group

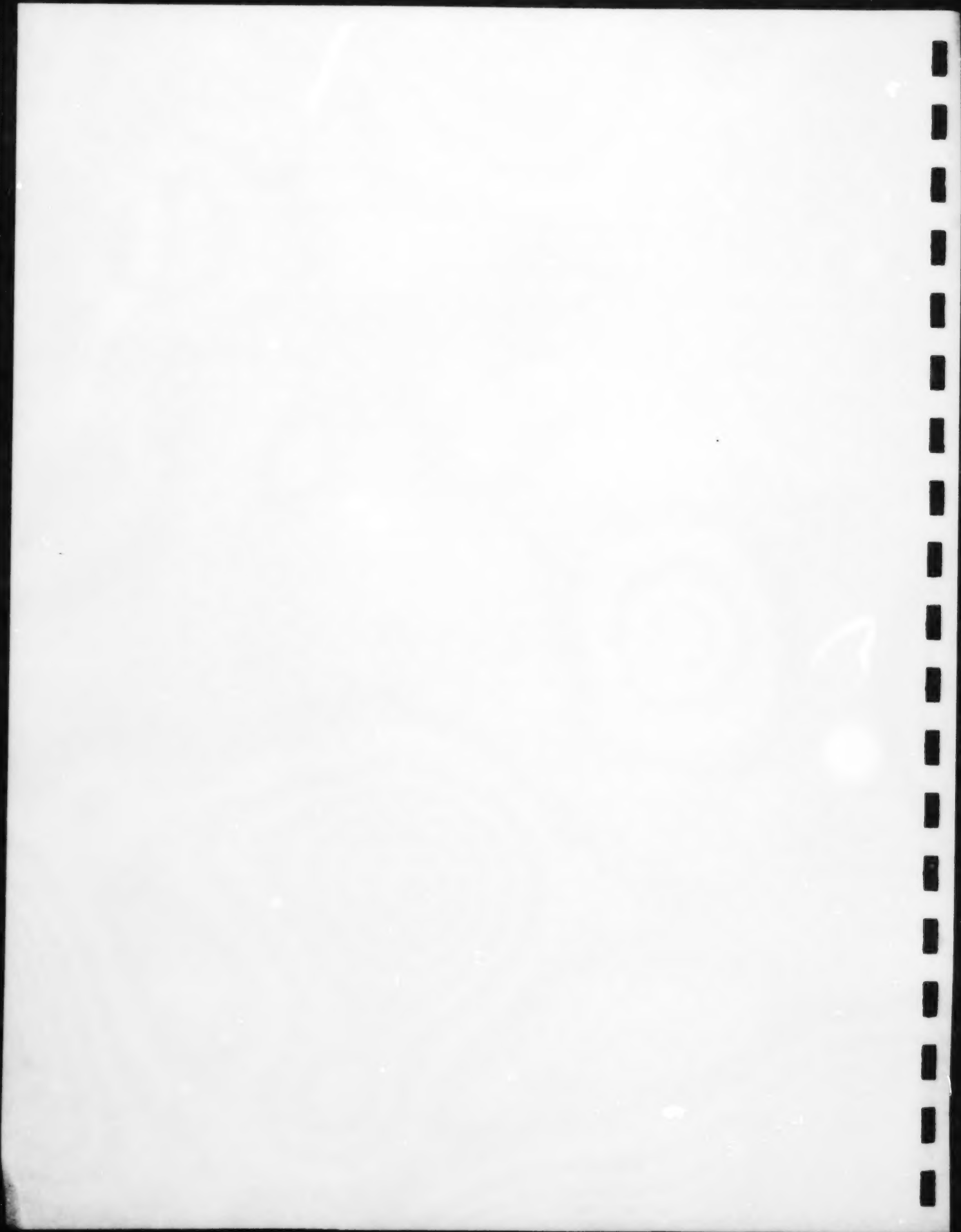
N.T.S. AREA 53F/13 SW

FILE NO. 94
REF. AU 1

MAP REFERENCES

- Map 53F, Opasquia Lake (Topography), Scale 1:250 000, Mines and Technical Surveys, Canada.
- Map 3656G, Hayward Lake (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).
- Map 35653G, Opasquia Lake, Ontario-Manitoba, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake Area, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 40A, Ontario-Manitoba border, (Geology), Scale 1:253 440 - Accompanying Report by Derry and MacKenzie (1931), Ontario Department of Mines.
- *Map 60-2, Sagawitchewan Bay (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Claim Map Series SW13, 53F, Scale 1:31 680, circa 1948, Mining Recording, Manitoba Mines Branch.

Comp./Rev.	CC	JR	PA
By Date	03-74	09-87	06-90



PRODUCT Pyrite

M.T.S. AREA 53E/16 SW

REF. PYR 1

NAME OF PROPERTY:

Ila

OWNER OR OPERATOR AND ADDRESS

1990 - BP Minerals Limited
Suite 1700
55 University Ave.
Toronto, Ontario
M5J 2H7

OBJECT LOCATED: Centre of Ila No. 19

MINING DIVISION Winnipeg

Lat. 53° 47.6'

Long. 94° 23.2'

UNCERTAINTY: 500 m

Sec.

Tp. 55

R. 21 EPM

DESCRIPTION OF DEPOSIT

The deposit is situated in Precambrian volcanic rocks (andesite, dacite, basalt and derived schists) of the Hayes River Group.

The drill holes showed tuff through the entire drill length with pyrrhotite and minor chalcopyrite and pyrite mineralization.

HISTORY OF EXPLORATION AND DEVELOPMENT

The deposit was found in three drill holes and is located 2.4 km north of Grand Island in Island Lake, about 265 km southeast of the Hudson Bay railway line.

The area was partially staked under the IM No. 4 and Cup Nos. 1-2 claims in 1933 (Mining Claim Map). There is no information on these claims.

The area was open until 1956 when it was staked as Ila Nos. 15, 16 (W 27274, 75) by A. McPherson and Ila Nos. 19, 20, 22 (W 27207, 08, 10) by Mrs. C. Wass. Work was reported on these claims in 1957-58. In 1957, Canadian Nickel Company Limited did an airborne EM survey (Non-confidential Assessment File No. 91624). In 1957-58, 36 m³ (1288 cu ft) of rock was blasted or trenched on Ila No. 19. Work was reported on Ila No. 19 and 22 in 1959-60.

In 1960, the claims were assigned to Carl Wass who signed an option agreement with Phelps Dodge Corporation of Canada, Limited that year. Three holes totalling 66 m (218.5 ft) were drilled by Phelps Dodge Corporation of Canada, Limited on Ila No. 19 (Non-confidential Assessment File No. 91157). Map 26-1960 by Quinn (1960) indicates a Ni, Co, Cu, po occurrence on the Ila No. 15 (W 27274) claim. The Ila claims were cancelled in 1961.

Associated minerals or products of value
nickel, copper, cobalt.

NAME OF PROPERTY

Ila

N.T.S. AREA 53E/16 SW

FILE NO. 330

REF. PYR 1

HISTORY OF EXPLORATION AND DEVELOPMENT cont'd

The area was restaked as C.W. Nos. 1-4 (W 35393-6) by Carl E. Wass in 1962. Work was reported in 1963-64. The claims were cancelled in 1966.

In 1970 an airborne EM survey was done by Sherritt Gordon Mines, Limited under Airborne Permit No. 91 (Non-confidential Assessment File No. 91684). Ila Nos. 1 and 2 (W 43327 and 28) were staked by C.E. Wass that year, but were cancelled in 1972.

The area was examined by L. Solkoski and S. Mabbula of the Manitoba Government in 1977: a 7.6 m wide mineralized zone (with py?-cpy-Pb-po) was noted on a small island (former Ila 15 claim) (Field Notes, Geological Services, Unpublished Files).

CB 11739 (Bel 8), area 259 ha, was staked by Walter A. Miller (assisted by G. Cattz and R. Shultz) for Wambel Gold Limited in 1980. The claim was cancelled in 1982.

The area was restaked as Game 7 (W 48859) by BP Minerals Limited in 1983.

REFERENCES

- Fyson, W.K., Herd, R.K. and Ermanovics, I.F., 1978, Diapiric structures and regional compression in an Archean greenstone belt, Island Lake, Manitoba; Canadian Journal of Earth Sciences, v. 15, No. 11, p. 1817-1825.
- Gilbert, H.P., 1985, Geological investigations in the Island Lake-Stevenson Lake area (53E/13 NE and NW; 53E/16 SE and SW; 63H/16 NE), in Manitoba Energy and Mines, Geological Services, Mines Branch, Report of Field Activities, 1985, p. 187-196.
- Godard, J.D., 1963, Island Lake-York Lake area; Manitoba Mines Branch, Publication 59-3, 45p.
- Manitoba Mines Branch:
- a) Non-confidential Assessment Files; File No. 91157, 91786.
 - b) Mining Recording Files; File Nos. 48946-47, 49 (Ila No. 19-20, 22); File Nos. 49013, 14 (Ila No. 15, 16); File Nos. 60898-60901 (C.W. Nos. 1-4).
- Quinn, H.A., 1960, Island Lake, Manitoba - Ontario (Descriptive Notes); Geological Survey of Canada, Map 26-1960.
- Wright, J.F., 1928, Island Lake area, Manitoba; Geological Survey of Canada, Summary Report 1927, Part B, p. 54-80.

MAP REFERENCES

- *Map 53E/16, York Lake, (Topography), Scale 1:50 000, Mines and Technical Surveys, Canada.
- Map 4023G, York Lake, (Aeromagnetic), Scale 1:63 360, Manitoba Mines Branch and Geological Survey of Canada.
- Map 94-1986, East-Central Manitoba, (Lake sediment and water geochemical survey), Scale 1:250 000; GSC Open File 1358, Geological Survey of Canada (1986).

NAME OF PROPERTY

Ila

N.T.S. AREA 53E/16 SW**FILE NO.** 330**REF. PYR** 1

MAP REFERENCES cont'd

- Map 35553C, Island Lake, (Airborne Gamma Ray Spectrometry), Scale 1:250 000, Province of Manitoba, Province of Ontario, Geological Survey of Canada (1978).
- Map 211A, Island Lake, (Geology), Scale 1:126 720-Accompanying Report by Wright (1928), Geological Survey of Canada.
- Map 26-1960, Island Lake, (Geology), Scale 1:253 440-Accompanying Descriptive Notes by Quinn (1960), Geological Survey of Canada.
- Map 59-3B, York Lake, (Geology), Scale 1:63 360-Accompanying Report by Godard (1963), Manitoba Mines Branch.
- Preliminary Map 1985 I-4, Meegeesiwaseeson Island, (Geology), Scale 1:20 000, by H.P. Gilbert, Manitoba Mineral Resources Division (1985).
- Map 1646A, Island Lake (Geology), Scale 1:250 000, by R.K. Herd, K.L. Currie, I.F. Ermanovics, Geological Survey of Canada (1987).
- #Claim Map Series SW 16, 53E, Scale 1:31 680, circa 1961, Mining Recording, Manitoba Mines Branch.

REMARKS

On an island 900 m to the northeast, a grab sample of a quartz vein returned 56.23 g/t (1.64 oz) Ag, 0.01% Cu, 0.02% Pb, 0.05% Zn and less than 0.01% Mo (Non-confidential Assessment File No. 91786, file 2 of 4).

Comp./Rev.	CC	PA
By Date	03-74	05-90
